Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

December 21, 1959

RECEIVED
DEC 28 1959
THE CHEMISTS' CLUB
LIBRARY

Baker

CARBON DISULFIDE

TECHNICAL

J.T.Baker CHEMICAL

J. T. BAKER CHEMICAL CO.
PHILLIPSBURG, N. J.
New York • Chicago • Philadelphia • Los Angeles

'SHARPLES' brand

PRIMARY ALKYLAMINES

METHYLAMINE
ETHYLAMINE
PROPYLAMINE
ISOPROPYLAMINE
BUTYLAMINE
sec-BUTYLAMINE
ISOBUTYLAMINE
AMYLAMINE

For additional information, write to Dept. O:
INDUSTRIAL CHEMICALS DIVISION
PENNSALT CHEMICALS CORPORATION
3 Penn Center • Philadelphia 2, Pa.

Pennsalt Chemicals
ESTABLISHED 1850

CARBIDE'S

ALCOHOLS

- Methanol
- Ethanol
- Isopropanol
- Butanol
- Primary Amyl Alcohol
- 2-Ethylhexanol

Immediate shipment from our plants, bulk storage facilities, and warehouses across the nation.

UNION CARBIDE CHEMICALS COMPANY

UNION CARBIDE

30 EAST 42nd STREET NEW YORK 17, N. Y.

You can rely on **DU PONT HYTROL® O** CYCLOHEXANONE for excellent solvent power and 99.3% purity

High-quality Du Pont Hytrol® O cyclohexanone is an excellent, time-proven solvent for polyvinyl chloride and its copolymers, other resins, plastics and many types of finishes. Hytrol® O is also an outstanding solvent for many of the newly developed and experimental insecticides. Miscible with ether, alcohol and other organic solvents. Available in 55-gal. drums, tank trucks or tank cars, through your local Du Pont Agent.

For prompt, dependable service, contact your local Du Pont Agent

CALIFORNIA
Los Angeles.....Braun Chemical Co.
Los Angeles.....McKesson & Robbins*
San Francisco.....Braun-Knecht-Heimann Co.
ILLINOIS
Chicago.....Central Solvents & Chemicals Co.
INDIANA
Fort Wayne
Hoosier Solvents & Chemicals Corp.
Indianapolis
Hoosier Solvents & Chemicals Corp.
KENTUCKY
Louisville.....Dixie Solvents & Chemicals Co.
LOUISIANA
New Orleans
Southern Solvents & Chemicals Corp.
MARYLAND
Baltimore.....Leidy Chemicals Corp.
MASSACHUSETTS
Boston.....Hawa & French, Inc.
Worcester..Chemical Sales & Service Co., Inc.
MICHIGAN
Detroit.....Western Solvents & Chemicals Co.
MINNESOTA
Minneapolis.....McKesson & Robbins**
MISSOURI
Kansas City..Missouri Solvents & Chemicals Co.
St. Louis...Missouri Solvents & Chemicals Co.
NEW JERSEY
Newark.....Chemical Solvents, Inc.
NEW YORK
Buffalo....Buffalo Solvents & Chemicals Corp.
OHIO
Cincinnati...Kanawa Solvents & Chemicals Co.
Cleveland....Ohio Solvents & Chemicals Co.
Toledo.....Toledo Solvents & Chemicals Co.
TEXAS
Dallas.....Texas Solvents & Chemicals Co.
Houston.....Texas Solvents & Chemicals Co.
WISCONSIN
Milwaukee
Wisconsin Solvents & Chemicals Corp.

*Mefford Chemical Co., Branch **Merchants Chemical Co., Inc., Branch

DU PONT REG. U.S. PAT. OFF.

INDUSTRIAL & BIOCHEMICALS DEPARTMENT
E. I. du Pont de Nemours & Co. (Inc.), Wilmington 98, Delaware

BETTER THINGS FOR BETTER LIVING...*THROUGH CHEMISTRY*

HIGH QUALITY

SODIUM SULPHATE

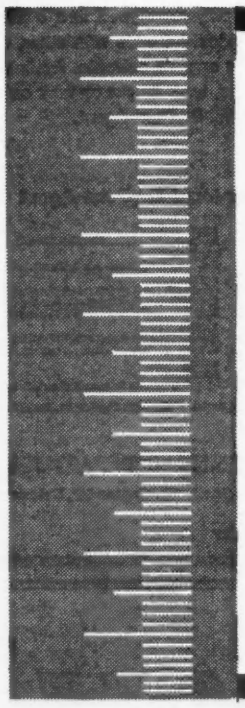
PRIOR CHEMICAL CORPORATION
420 LEXINGTON AVENUE
NEW YORK
CABLE: PRIORCHEM NEW YORK
PHONE: LExington 2-9811

borax

U.S. BORAX & CHEMICAL CORPORATION

LOS ANGELES • NEW YORK • CHICAGO • ST. LOUIS • ATLANTA • PHILADELPHIA • CLEVELAND

by any yardstick Westvaco® is first in Ba chemicals



First in application development! Westvaco research has amassed a fund of data you will find valuable in your work in new barium applications.

If barium could conceivably provide the solution to a problem for you, talk to Westvaco about it.

First in product quality and diversity! We produce the greatest volume and most comprehensive line of barium chemicals made. At the same time, we set the industry's standard for continuous volume production.

If you want the *best* in barium, in the form that best meets your needs, let Westvaco supply it.

First . . . and only . . . integrated producers! We have blocked out and proved mineral reserves to meet all foreseeable demand long into the future. Stocks of finished materials are maintained ready for shipment from strategic locations spanning the continent.

If you want the most dependable source of supply, call Westvaco today.

WESTVACO BARIUM PRODUCTS Barium Oxide Barium Pentahydrate—Flake Barium Octahydrate—Crystal or Flake Barium Nitrate Barium Peroxide Barium Carbonate* Blanc Fixe (Barium Sulfate)* Black Ash (Barium Sulfide)* Barytes, Ground* *Western delivery only.

fmc FOOD MACHINERY AND CHEMICAL CORPORATION

Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION

Westvaco Mineral Products Division

General Sales Offices:
161 E. 42nd STREET, NEW YORK 17

RECEIVED
DEC 28 1959
THE CHEMISTS' CLUB
LIBRARY

Oil, Paint and Drug Reporter

Vol. 176 No. 26 30 Church St., New York 7, N.Y. December 21, 1959

Chemicals Out of a Reactor

Hercules Powder Company has a new idea: Put some basic organic raw materials in a nuclear reactor, do a few technical things, out will come commercial chemical products.

The company is enthusiastic about the process: "This could be the first peacetime application of atomic energy capable of competing with standard chemical manufacturing techniques."

The Wilmington, Del., company is happily pointing out right now that its scientists have just developed a design concept for a new type nuclear reactor on which practical development of the new processes may be based.

The processes for making several widely-used chemical products is disclosed in Canadian Patent No. 576,979 and German Patent No. 1,045,403, newly issued to Hercules.

The company is making its research results on the new nuclear reactor and processes available to the public through a series of technical articles which are being submitted for early publication.

Heretofore, nuclear reactors have been used to produce electrical or thermal power, but at a cost in excess of conventional methods. Chemical materials have also been made by radiation in a reactor, but the cost, using existing nuclear reactor designs, has been prohibitive.

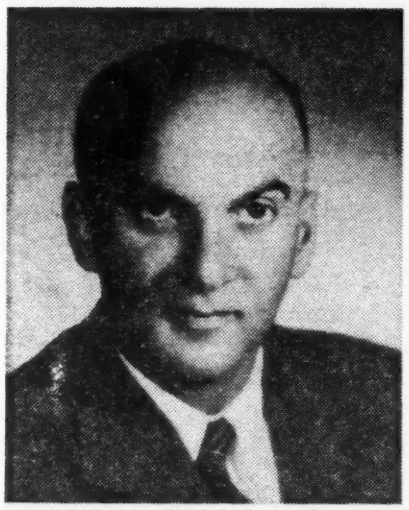
In disclosing work done over the past ten years by a group of Hercules scientists, Dr. Robert W. Cairns, company research director, says that present estimates based on laboratory work indicate it would be possible to make ethylene glycol, for example, in the new-type nuclear reactor at a cost competitive with conventional glycol manufacture.

Hercules' intensive research has been directed to make efficient utili-

—Continued on page 40

Chemical People Are Watching ICC As Explosives Rules Face Changes

The chemical industry turned its attention expectantly to the Interstate Commerce Commission last week as that body came forth with a proposed set of recommendations to govern the carrying of explosives by truck. Since many potentially dangerous chemicals move over the nation's highways, the industry paid close attention when ICC said that new legislation may be advisable to lessen the hazards of transporting explosives and other similar materials.



MADE TOP MAN: Frank B. Jewett, jr., elected president of Vitro Corporation of America, New York. Formerly executive vice-president, he succeeds J. Carlton Ward, jr., who has been named board chairman.

ICC said it is convinced that existing rules will have to be "re-appraised and re-examined." The agency's opinion came after an examination of the facts concerning the explosion of a dynamite-laden truck at Roseburg, Ore., last August 7, as a result of which thirteen persons were killed and 125 other injured.

No Details Yet

In a report on the accident, the commission did not detail the changes in the rules or in the law that might be needed, but had the following to say under the heading "Recommendations":

"In an endeavor to comply with the purpose of this investigation and to obtain all pertinent facts connected with this accident so that an accurate determination could be made of its cause and also to determine what action, if any, should be taken to prevent a recurrence of this type of accident, an opportunity was afforded to any person, other than the witneses called, to submit such facts or recommendations which in their opinion would provide additional safeguards.

"In response thereto, several witnesses submitted recommendations in respect of regulations regarding vehicles transporting explosives or other dangerous articles, which included stricter enforcement of existing safety regulations, a requirement that a relief driver accompany a driver of such vehicle, that lunches be furnished drivers so that they would not be required to leave their vehicles unattended,

—Continued on page 39

Celanese Plastics Unit Scoring Another First

Celanese Plastics Company has scored another "first" in polyethylene. The firm's Houston, Tex., facility, the first to produce commercial quantities of high-density polyethylene — back in March 1957—is now slated to benefit from the first major expansion in the field.

A 10-million-pound capacity boost, expected to be completed by next March, will carry the plant's output potential up to 50 million pounds a year, the Celanese Corporation of America subsidiary reports.

Behind the move, the company says, is a rapid build-up of demand—so rapid,

Continued on page 39

Potassium Phosphate Plant Will Be Erected by Hooker

Hooker Chemicals Corporation revealed plans today (December 21) to build a potassium phosphate plant at Jeffersonville, Ind. Slated for startup by mid-1960, the plant will be operated by the Niagara Falls, N. Y., phosphorus division.

Principal product of the new facility will be tetrapotassium pyrophosphate. Hooker notes that increasing quantities of such phosphate are moving into liquid detergent formulations.

Kefauver's Head Now Buzzing With Master Plan for Reforming Practices in the Drug Industry

With a week of public hearings behind him, Sen. Estes Kefauver of Tennessee, whose senate investigating committee is now taking a breather in its probing of the pricing practices of the ethical drug manufacturers, is starting to think in terms of legislation to curb producer practices. He says such practices are the cause of today's drug prices being "too high." He says the evidence of the first week of hearings has given substance to the citizen complaints that drug prices are unreasonable, at least those for the treatment of arthritis.

The senator hasn't detailed the scope of the bill he has in mind, but he says there are some matters brought out in the committee probing that stand out in his estimation and are in need of further consideration.

What the Senator Has in Mind

Sen. Kefauver says these matters include:

• Expenditures for the advertising and promotion of ethical drugs. The senator says that the money spent for this purpose does not expand the market for drugs, but is used in a struggle to persuade the physician to write the prescription in the trade name of a particular company.

• Checks on advertising claims for new drugs. A recommendation that new drug applicants be required to file their advertising and promotional literature with the Federal Trade Commission at the same time they make application for new drug clearance with the Food & Drug Administration is "very important" in the senator's opinion.

• Generic names. If the use of generic names is good enough for the government in buying drugs for the military and government hospitals, in the opinion of the senator, it is "an interesting point" to consider further whether physicians should not do more prescribing in the generic name of the drug.

• Quack drugs. There is need for legislation to get quicker action in protecting the people against false and improper

—Continued on page 37

Sun Oil Reported Ripe For Naphthalene Plunge

More petroleum naphthalene capacity looms on the horizon. Latest report is that Sun Oil Company, Philadelphia, is strongly considering putting up a 100-million-pound-a-year plant at its Toledo, Ohio, refinery.

Sun at present will neither confirm nor deny these persistent reports. Purchasing agents for a number of phthalic anhydride producers tell OPD that Sun is "very serious" about the project and is actively soliciting business among them.

For this reason, Ashland Oil & Refining Company, Ashland, Ky., is still unable to announce a firm price for petroleum naphthalene, since it is running into Sun competition in its market area. Potential consumers indicate that the price of petroleum-derived material is now around the 5.7-cent-a-pound level.

Adding fat to the fire is confirmation last week by Reichhold Chemicals, Inc., of an earlier OPD report that it will build a 60-million-pound-a-year phthalic an-

—Continued on page 35

Dr. E. Gifford Upjohn

Upjohn President Cites Need for Proper Profit

A drug company must make a profit if it is going to stay in business. A big league drug maker always finds his costs higher than a minor leaguer's because of research pioneering, promotion and advertising.

These facts, already hammered hard at the Kefauver anti-monopoly committee, were driven home again last fortnight by Dr. E. Gifford Upjohn as he told the Kefauver probers some of the problems involved in running a major drug company.

The president of Upjohn Company, Kalamazoo, Mich., faced a battery of questions in Washington similar to those that earlier in the week had captured the headlines when two other drug company heads appeared—Francis C. Brown, of Schering

—Continued on page 35

Heyden Firms Up Plans For '60 Debut in Maleic

Heyden Newport Chemical Corporation isn't kidding about its proposed 24-million-pound-a-year maleic anhydride plant.

Last week the New York-based firm announced it had let contracts for design and construction of the Fords, N. J., facility to Scientific Design Company.

After Heyden originally announced its

—Continued on page 46

Roger Williams Acquires British Consulting Firm

Roger Williams Technical & Economic Services, Inc., N. J., has acquired the British consulting firm of George Lewi & Partners, London. Terrence D. O'Keefe, executive partner of the Lewi organization, has been appointed vice-president and European manager of the Williams corporation.

Since 1950, Roger Williams has conducted economic surveys, both domestically and abroad, for many chemical, rubber and petroleum companies and for government agencies.

DuPont, German Company in Pigments Venture

E. I. duPont de Nemours & Co. is teaming up with a German partner to make and sell titanium dioxide pigments abroad.

The Wilmington, Del., chemical producer has joined with Sachtleben AG, of Cologne, to form Pigment-Chemie GmbH.

Sachtleben owns 74 percent of the company and duPont 26 percent. Starting capital is DM 35 million, or $8,330,000.

A new plant will be built and operated by Pigment-Chemie at the site of Sachtleben's present lithopone plant at Homberg on the Rhine.

DuPont will provide technology, assist in the design and start-up of the plant, and train supervisory, operating and sales personnel in the United States.

The plant is scheduled to begin operations in about two years and will have an initial annual capacity of 40 million pounds. It will provide new jobs for about 120 persons. Pigment-Chemie will open its main office in Cologne later this month.

The company will supply titanium dioxide pigments primarily for the paint, plastics, paper and rubber industries in Germany, other Western European countries, and some additional areas outside Europe.

Explaining the formation of the new company, Dr. Bruno Schaefer, managing director of Sachtleben, says:

"The increasing demand for titanium dioxide pigments in the German and world markets has resulted in our decision to

—Continued on page 60

Chemical Industry Wage Rate For Gov't Work to Be Probed

Minimum wage rates in the industrial and refined basic chemical industry will be reviewed at a public hearing scheduled for January 26 by the Department of Labor. The hearing will be held under the Walsh-Healy public contracts law, which authorizes the Secretary of Labor to determine the "prevailing minimum wage" for the purpose of setting floors on wages paid by firms engaged in government contract work.

The present determined prevailing minimum wage for the industry is $1.15 an hour, except in certain states in the south where the rate is $1 an hour.

A wage survey, made by the Bureau of Labor Statistics on the basis of 1958 operations of the industry, indicates that the rates being paid average far in excess of these early determinations.

What Contracts Will Be Affected

Any new determination made by the secretary as a result of the testimony and evidence produced at the forthcoming hearings will apply on any contract made after the determination between the government and a member of the industry amounting to $10,000 or more.

Government purchases from the industry under the Walsh-Healey law amounted to approximately $30 million during fiscal year 1958. According to the wage survey of BLS for the industry, the trade employed 78,000 production workers in 718 establishments having ten or more employees.

The department urged interested persons to participate in the hearing and furnish data showing minimum wages paid, the number of workers paid the minimum rates, the entrance rates for beginners, the extent of competition among different plants in geographic areas, the adequacy of the proposed definition of the industry and the changes in minimum wages since October 1958.

Eastman Chemical Offers n-Butyronitrile Specialty

Eastman Chemical Products, Inc., Kingsport, Tenn., has just developed a commercial process for the production of n-butyronitrile.

This subsidiary of Eastman Kodak Company, New York, says that development quantities of the specialty solvent and chemical intermediate, will be available at a price of $1 a pound in drum lots. The company is offering samples and further data to those who think they might have a use for the material.

Pennsalt Will Build New Plant in Georgia

Pennsalt Chemicals Corporation, Philadelphia, is all set to invest about $500,000 in a new blending, packaging and warehousing plant at Atlanta, Ga. Scheduled to go on-stream in the spring of 1960, the plant will be the seventh unit devoted to production of Pennsalt specialties that has been added in the past five years.

The Atlanta plant will be constructed on a ten-acre site served by a direct rail spur and express highway permitting fast service to area customers. A modern one-story structure, it will provide production and warehousing facilities for Pennsalt's brand-name chemical products.

In announcing the new facility, Pennsalt president William P. Drake said:

"The Atlanta plant continues our program of emphasis on customer-oriented

—Continued on page 39

Benzene Hexachloride Put On 'Direct Sales' Schedule

In a move that could be a trend-setter, Diamond Alkali Company has initiated a "direct sales" price schedule for its technical benzene hexachloride. Up until now, the Cleveland, Ohio, firm and its competitors have sold BHC and other pesticides to formulators on a consignment, or pay-as-they-use basis, primarily.

Under Diamond's new "direct sales" schedule, low gamma BHC in carload or truckload quantities is priced at .056 cents per gamma unit in bags and at .050 cents in bulk. High gamma BHC is now at .065 cents in bags. On consignment, prices are unchanged.

Gen'l Aniline's Venture Stymied by Interhandel

General Aniline & Film Corporation, New York, has been blocked by court injunction from acquiring a source of photographic supply for its Ansco film subsidiary.

A permanent injunction, issued by Judge David A. Pine, presiding over the long, drawn-out, legal wrangle between Interhandel, a Swiss holding company, and the Justice department, blocks General Aniline from removing a redemption provision from its class A stock.

Interhandel has been trying since 1947 to regain ownership of General Aniline, which was seized by the government as a former enemy asset. The government claims that Interhandel was only a "front" for German owners.

General Aniline had proposed to buy a paper plant by exchanging its class A stock in return for the plant. But the company owning the plant, which was un-named, insisted that a redemption clause, now carried by the class A stock, be removed.

Interhandel objected to Judge Pine that removal of the clause would cause part of the stock of the disputed company to disappear permanently under the proposed stock exchange.

The Week's Price Changes

Aluminum, Candelilla Wax, Fishmeal and Fishscrap Advanced. Lead, Propylene Oxide and Glycols, Tin and Salts Reduced.

Prices Advanced

Aluminum, 0.3c. per lb. (p. 33).
Candelilla wax, 1c. to 2c. per lb. (p. 61).
Coconut oil, Pac. coast, ¼c. per lb. (p. 61).
Copra, $7.50 per ton (p. 61).
Corn oil, crude, ⅛c. per lb. (p. 61).
  Refd., ⅛c. per lb.
Fishmeal, Atl. Coast, $3 per ton (p. 47).
  Scrap, Atl. Coast, $3 per ton (p. 47).
Palm oil, 1/10c. per lb. (p. 61).

Prices Reduced

Bergamot oil, $1 per lb. (p. 55).
Casein, Argentine, ½c. per lb. (p. 58).
Citral, 25c. per lb. (p. 55).
Cocoa butter, 1c. per lb. (p. 61).
Cottonseed meal, 50c. per ton (p. 61).
Cottonseed oil, crude, ¼c. per lb. (p. 61).
  Refd., ¼c. per lb. (p. 61).
Dipropylene glycol, ¾c. to 1c. per lb. (p. 42).
Dried blood, N.Y. and Chicago, 25c. per unit-ton (p. 47).
Lard, cash, ¼c. per lb. (p. 61).
Lead, ½c. per lb. (p. 33).
  Monosilicate, ½c. per lb. (p. 58).
  Red, ½c. per lb. (p. 58).
Lemongrass oil, 20c. per lb. (p. 55).
Litharge, ½c. per lb. (p. 58).
Linseed meal, $4 per ton (p. 61).
  Acid, ½c. per lb. (p. 61).
  Oil, ½c. per lb. (p. 61).
Menhaden oil, crude, ¼c. per lb. (p. 61).
Mineral orange, ½c. per lb. (p. 58).
Olive oil, spot, 5c. per gal. (p. 61).
Orange oil, Fla., 13c. per lb. (p.55).
Peanut oil, crude, ½c. per lb. (p. 61).
  Refd., ½c. per lb. (p. 61).
Propylene glycol, tech. and USP, ¾c. to 1c. per lb. (p. 42).
Propylene oxide, 1c. per lb. (p. 42).
Soybean oil, crude, ¼c. per lb. (p. 61).
  Refd., ¼c. per lb. (p. 61).
Tankage, N.Y., 25c. per unit-ton (p. 47).
Tin metal, 1c. per lb. (p. 33).
  Salts, ½c. to ⅝c. per lb. (p. 33).
Tripropylene glycol, ½c. to 1c. per lb. (p. 42).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:

(100=1949 average)

Dec. 18, 1959	Dec. 11, 1959	Dec. 19, 1958
111.70	111.67	110.73

Aluminum Chemicals to Go Up

The chemical industry will have to pay more money for its aluminum. Furthermore, higher price tags are doubtless in store for a number of aluminum chemicals, including calcined alumina, aluminum hydrate and aluminum fluoride. Another likely candidate for price hikes: sodium fluoride. This situation came about in dribs and drabs last week. First, Aluminium, Ltd., raised its prices on aluminum by three-quarters of a cent per pound—everywhere but in the United States.

Then, possibly heartened by the move, Aluminum Company of America, Pittsburgh, Pa., largest domestic producer, jacked up pig prices here by 1.3 cents a pound to 26 cents, 10,000-pound lots, freight allowed.

Waiting only a day, Kaiser Aluminum & Chemical Sales, Inc., and Reynolds Metals Company, followed Alcoa's lead and hiked their prices accordingly. Smaller producers are expected to follow along.

With the new price, the aluminum industry finds itself right back where it started before price-cuts in April, 1958. But officials of the industry leave the door open for further boosts. The increase does not make up for added labor and materials costs in the last year-and-a-half, they contend.

Furthermore, there is some feeling that

—Continued on page 46

NEW DIRECTOR: John F. Goetz, elected to the board of Reichhold Chemicals, Inc., White Plains, N.Y. A partner in Reichhold's legal firm, Goetz & Goetz, of Detroit, Mich., the new director will also be the board's vice-chairman.

Hydrochloric Acid Added By Company in Louisiana

Arkansas Louisiana Chemical Corporation, Shreveport, La., has added hydrochloric acid to the list of products turned out at the facilities it leases from the government at Pine Bluff Arsenal.

Equipment to produce the acid from by-products of materials produced at the plant was added last fall at a cost of $50,000. As a result, the company, which is a wholly-owned subsidiary of Arkansas Louisiana Gas Company, will have a hydrochloric acid capacity of 6,000 tons annually.

Citric Not for Tomatoes

A proposed ruling of the Food & Drug Administration refusing to permit the inclusion of citric acid as an optional ingredient in canned tomato products has been allowed to go into effect, the agency announces.

Index to News and Market Reports

Association News

Chemical Buyers Set Meetings Theme.. 40
Chemicals in 60's; P.A.'s Theme..... 36
Gas Group to Meet..... 60
MCA Takes a Peek Into 1980..... 7
TAPPI Moves Headquarters..... 46

Government News

Butadiene Plant Up For S-[illegible]..... 5
Chemical Industry Wages to Be Probed. 4
Chemical People Watch ICC..... 3
FDA Gets Tolerance Bids..... 43
FDA Rules on Citric Acid..... 4
Fluorspar Trade Battles Importers..... 5
Kefauver Masterminds Reform Plan..... 3
Mallinckrodt Gets Gov't Contract..... 59
Monsanto, Grain Processing Get Nod.... 39
Pesticides: Ideal Killer No Idle Dream.. 5
Unsaturated Fats, Oils Claims Debunked. 7

Industry News

Aluminum Chemicals Going Up..... 4
American Lignite Has New Montan Wax 7
BHC Put on Direct Sale Basis..... 4
Celanese Unit Scores Another First..... 3
Chemical Dividends Rise..... 46
Chemicals Out of a Reactor..... 3
Dartell Changes Hands..... 36
DCB Value Increasing..... 7
DuPont Slates Acid Unit in Houston..... 7
Eastman Has New Polyethylene Compound 36
Eastman Offers n-Butyronitrile..... 4
FMC's Niagara Division Has New Unit.. 59
Heyden Preps for Maleic Debut..... 3
Hydrochloric Acid Added to Product Line 4
LPG's Still Fair-Haired..... 7
Michigan and Murphy Have Plans..... 5
Penicillin's Relative Called Stronger..... 53
Pennsalt Will Build Georgia Plant....'.. 4
Potassium Phosphate Unit Set..... 3
Reichhold Has 'Real Estate' Plans..... 5
Spearmint Crop Gains; Peppermint Drops 5
Sun Oil Reported Ripe..... 3
Upjohn Head Cites Profit Needs..... 3
US Steel Slates Coaltar Boost..... 5
Vinyl Plant Seen Growing Like Weed.... 5

International News

Abbott Starts Up SA Unit..... 5
Allied Acquires Mining Concern..... 5
Armour, Carlo Erba in Joint Venture... 7
DuPont, German Firm Team Up..... 3
General Aniline Venture Stymied..... 4
Glidden Licenses British Firm..... 39
Roger Williams Buys Consulting Firm.. 3

Personnel News

Allied Advances Reynolds..... 40
Allied Fills Two Key Spots..... 36
API Appoints Humbert..... 7
Cumberland Chemical Names O'Leary.. 7
Dixon Names Polite to Executive Post... 5
Gulf Oil Elects Brockett..... 40
Hooker's Murray Retires..... 7
Reichhold Names Goetz to Board..... 4
Spencer Kellogg Elects Thomas..... 5
Vitro Makes Jewett Top Man..... 3

Market Reports

Acids 33
Agricultural Chemicals 47
Aliphatic Organics 42
Aromatic Chemicals 56
Botanical Drugs, Gums 50
Chelating Agents 57
Chemical Specialties 57
Coal Chemicals 44
Coatings Materials 58
Drugs 49
Emulsions & Latexes 57
Essential Oils 56
Fats & Greases 62
Fertilizer Materials 47
Fine Chemicals 49
Heavy Chemicals 33
Industrial Organic Chemicals 42
Metals, Nonferrous 34
Naval Stores 59
Oil Cake and Meal 62
Oils 61
Paint Materials 58
Pesticides 47
Petrochemicals 42
Petroleum Derivatives 41
Protective Coatings Materials 58
Spices 56
Surface Active Agents 67
Trade Name Chemicals 57
Waxes 62

General Features

Advertisers' Index 67
Association Meeting Dates 7
Bids Wanted 60
Classified Advertisements 66
Coal Chemical Output 42
Crude Oil Stocks 41
Current Market Quotations 9
Data Offered 46
Editorials 32
Imports 52
Jobs & People 38
Obituaries 60
OPD's Bookshelf..... 32
OPD Price Index 4
Washington Talks It Over..... 32

OIL, PAINT AND DRUG REPORTER, Vol. 176, No. 26, December 21, 1959. Published weekly on Monday except semi-weekly the last week in February and the last week in August by Schnell Publishing Company, Inc., 30 Church Street, New York 7, N. Y., U.S.A. Second-Class postage paid at New York, N. Y. Single copy price: 50 cents. Subscription prices:—United States and Possessions, $5 a year; Canada and Newfoundland, $7; other countries, $12. Copyright, 1959, Schnell Publishing Company, Inc.

MOVES TO NEW FIRM: L. John Polite, jr., appointed to a senior executive capacity by Dixon Chemical & Research, Inc., Bloomfield, N.J. Mr. Polite had been sales manager for the chlorinated products division of Diamond Alkali Company, Cleveland, Ohio.

Reichhold Has New Plans for 'Real Estate'

Reichhold Chemicals, Inc., with its facilities around the world springing up almost as fast as split-levels in suburbia, has just come out with another batch of plans for its company "real estate."

First deal is the enlarging of a phenol plant in Tuscaloosa, Ala. From headquarters in White Plains, N. Y., the company reports the increased facilities will put out 90 million pounds a year, as compared to the current 60 million. The project will cost Reichhold about $2.5 million.

Production of sodium sulfite for use by the kraft paper industry will increase correspondingly at the Tuscaloosa plant, Reichhold reports. Phenol is also produced by Reichhold at Tacoma, Wash., and Port Moody, B.C.

The company's second project is a new phthalic anhydride plant at Newark, Ohio. Plans for the unit, which will produce 60 million pounds a year, are just being completed, although first wind of the project came in an OPD "in-depth" article on November 30. The facility is expected to start production late in 1961.

When the Newark plant goes on stream,

—Continued on page 34

Michigan Chemical, Murphy Slate Bromine Output Hike

Michigan Chemical Corporation, St. Louis, Mich., and Murphy Corporation have slated an expansion program to double output of a jointly-owned bromine plant near El Dorado, Ark.

Construction of the new addition will begin immediately with completion scheduled for early summer of 1960.

The fleet of tankcars serving the facility, said to be the largest in the country, will also be doubled to permit users to profit by the lower delivered cost of quantity shipments.

As with the first unit, Murphy Corporation, headquartered at El Dorado, will continue to provide the natural brine for the joint-venture enterprise. Michigan Chemical Corporation will design, construct and operate the plant and merchandise the finished bromine.

Abbott Starts Up SA Unit

Abbott Laboratories, North Chicago, Ill., has just put on stream its largest overseas plant, located near Buenos Aires, Argentina. The new facility is equipped to manufacture a wide range of Abbott products in the form of liter solutions, emulsions, injectables and tablets.

Pesticide That Will Kill Vermin But Leave No Residue in Beef: A Cow-Land Senator's Dream

Sen. Milton R. Young, of North Dakota wants the government to undertake a crash research program to find a new cattle-use pesticide that won't leave a residue and bring charges of meat contamination by health authorities. The senator from the cattle country is afraid that unless something is done soon the beef raisers may find themselves in the same boat with the cranberry growers, who were brought to the brink of disaster last month because a few had failed to follow directions on the use of the weed-killer aminotriazole.

The legislator believes the job can be accomplished for about $7 million—a small price to pay, he says, in comparison to the losses the industry would suffer if charges could be substantiated that the pesticides now being used are finding their way to the dinner table.

Wants Money for USDA Research

Sen. Young would like to see Congress add this much to the appropriations of the research staff of the Department of Agriculture. He is circulating a letter to several of the cattlemen's associations seeking their support for the research program.

When the department's appropriation bill was before Congress earlier this year, Sen. Young sponsored an increase of $500,000 in research funds to find substitutes for present pesticides, which would be completely free of any side effects, such as those which occasionally occur at present. The increase was knocked out, however, when the bill went to conference with the house.

"The cranberry situation, I think, has emphasized the need for far greater research to develop non-chemical methods such as biological control agents or other pesticides which would leave absolutely no residue whatever, regardless of how they are used," the senator says.

"It seems to me that we will need a crash research program involving from five to seven million dollars to accomplish the necessary research. This must be done before we who are interested in the meat business find ourselves in the same trouble that the cranberry people did just a short time ago.

"Should the Secretary of the Department of Health, Education & Welfare make similar charges against the contamination of meat as he did cranberries, as the result of certain pesticides uses, meat prices with the present heavy supplies would undoubtedly drop drastically. Such price declines could cost producers hundreds of millions of dollars. Whether or not the accusations were well-founded would make little difference. The slightest suspicion on the part of consumers would be enough to materially affect consumer purchases," Sen. Young goes on.

"I know of no industry that has done

—Continued on page 45

Butadiene Unit of Gov't Put Up for Sale Again

The government is putting up its butadiene plant in Louisville, Ky., for sale —this time with no strings attached. General Services Administration says sale will be made when sealed bids are opened February 9.

Earlier, stipulations had been made that the plant would be held available for manufacture of butadiene via the alcohol process—uneconomical under any but the most dire emergency conditions.

Operated by Union Carbide Corporation during the war, the plant was put up for sale in 1953. No one wanted the $30 million plant on government conditions, however, and Publicker Industries, Inc., has been contract custodian of the idle plant.

The plant has three units for making butadiene from methanol—each rated at 20,000 tons. Demonstrated capacity is 87,000 tons per year.

TAKES COMPANY REINS: Fred W. Thomas, former executive vice-president, elevated to the presidency of Spencer Kellogg & Sons, Inc., Buffalo, New York. He succeeds Howard Kellogg, jr., who has become board chairman.

Vinyl Plant Growing Like Weed . . or Faster

A vinyl resin plant that grows like a weed, or maybe faster. That is what the Naugatuck Chemical Division of United States Rubber Company has in Painesville, Ohio, and Naugatuck is very happy about the whole thing.

The division has just announced that it has started another expansion program at the plant, producer of the company's "Marvinol" resin. This expansion will boost capacity by more than 30 percent.

Such growth is nothing new at Painesville, Earle S. Ebers, vice-president and general manager, points out. Since the company acquired the facility ten years ago this month it has more than tripled the facilities capacity.

"When this latest project is completed next July the plant will have an approximate capacity of 65 million pounds annually," Mr. Ebers observes.

This installation is the company's only plant to make vinyl resin, although at other plants Naugatuck does make polyesters, ABS polymers and urethanes.

Allied to Get Control Of British Mining Firm

Allied Chemical Corporation, New York, disclosed today (December 21) that it will acquire 51 percent of the shares of Montrose Exploration Company, Ltd., a United Kingdom company. The shares will go to Allied's fully-owned subsidiary, Allied Mining-South Africa, Ltd.

Montrose has scheduled a general meeting of shareholders for early in the year at which approval of the transaction will be requested. The company, which owns chrome ore deposits and mines in the Transvaal, has contracted with Allied to supply its requirements of chrome ore.

Fluorspar Conflict: Domestic Concerns Vs. the Importers

Domestic fluorspar producers want Congress to either curb the rising flow of fluorspar imports into the country by raising tariffs, or take other means to permit the industry to operate at a profitable level.

Importers and consuming industries are challenging the producers, however, with arguments that the domestic industry can not meet the needs of consumers, particularly for highly important acid-grade fluorspar.

Problems of the industry were outlined to the Tariff Commission last week by company representatives as the commission opened an investigation of the industry in line with a directive of the senate finance committee passed last session.

The commission is required to report back to the senate committee by February 29 with recommendations as to what action, if any, Congress should take to improve the plight of the fluorspar miners.

First of Two Senate-Ordered Probes

The inquiry is the first of two senate-ordered probes of the effects of rising imports on domestic production. The other has to do with the lead and zinc industry. Public hearings in this investigation will be held by the commission January 26.

The fact that the lead and zinc hearings have been scheduled led to rejection by the commission last week of an appeal by six domestic smelters for a review of the quotas of the metals. They wanted the government to cut back the quantities of lead and zinc coming into the country.

The commission ruled that the petition was unlawful under the escape clause and untimely in view of the broad study ordered by the senate.

Domestic fluorspar producers asked the commission to increase existing tariffs on fluorspar because the tariff of $1.875 per short ton on acid-grade fluorspar, as against $7.50 per ton on other grades, is completely ineffectual and in reverse.

The $7.50 rate "is not deterrent to imports of metallurgical-grade fluorspar" and the $1.875 duty on acid-grade "affords no protection whatsoever," it was argued.

Importers testified that government figures show that the United States is dependent on fluorspar from foreign sources and "it seems likely that this dependence will increase in the future in direct relation to the progressive depletion of US reserves and the progressive expansion of US industry."

Representatives of the consuming industries recalled to the commission that in each emergency domestic supplies have run short and steps have had to be taken to expand production and increase imports.

US Steel Slates Big Boost In Coaltar Chemical Output

A steep boost in naphthalene and other coaltar chemical capacity has been slated by United States Steel Corporation.

The company reports that coaltar distillation capacity will be increased at two major coal chemical facilities to meet peak demands.

Production capacity for coaltar distillation at Tennessee Coal & Iron Division's coke and coal chemical works in Fairfield, Ala., is being increased by more than 100 percent.

Expansion of this unit is scheduled for completion by the second quarter of 1960.

The other facility is under construction at US Steel's Clairton Works near Pittsburgh, Pa. Scheduled for completion in 1961, this unit is slated to replace existing facilities at Clairton.

Spearmint Crop Gain Fails to Offset Peppermint Drop

Lower peppermint oil prices and decreased production reduced the total value of the 1959 peppermint crop to growers below both levels of last year and of the 1949-1957 average.

Although spearmint oil was up both in quality and value over last year, the rise was not sufficient to offset the peppermint oil losses.

Final estimates of the crop year issued last week by the Department of Agriculture place a value of $3,413,000 on the peppermint crop and $2,790,000 on the spearmint crop.

Last year the peppermint crop was worth $10,199,000 to growers and the spearmint crop, $1,892,000. The nine-year averages are $9,377,000 and $2,622,000, respectively.

Prices of peppermint oil to growers averaged $3.52 a pound this year, the department says, ranging from $5.80 a pound in Indiana to a low of $2.65 for producers in Washington. In 1958 the average for the year was $4 a pound and over the nine-year span the average was $5.25 a pound.

Spearmint prices averaged $4.06 a pound. This compares with $3.91 last year and $4.43 a pound for the nine-year average.

Production of peppermint oil amounted to 2,388,000 pounds from an average yield of fifty-eight pounds per acre from a total of 40,900 acres harvested. In 1958 the production totaled 2,550,000 pounds, average yield sixty pounds per acre and area har-

—Continued on page 40

▶ CHEMICAL TARGETS FOR THE SIXTIES, a special four-page report.

NEXT WEEK — OPD's forecast of the next ten years for key chemical process materials.

PENICK and TYROTHRICIN

two names that belong together

For years this perfect combination has been the starting point for many successful pharmaceutical products.

Tyrothricin – the first commercial antibiotic – is available from Penick in two grades . . .

TYROTHRICIN USP
TYROTHRICIN USP defatted

. . . both produced under the most exacting biological controls. Potency consistently exceeds minimum USP standards.

GRAMICIDIN, TOO!

Penick Gramicidin USP is recommended when a concentrated antibiotic with the same type activity as tyrothricin is required.

AMPLE STOCKS COAST-TO-COAST!

Penick Tyrothricin and Gramicidin are available for fast shipment from stocks maintained in New York, Chicago, Los Angeles, San Francisco, and Portland, Oregon.

NEW DRUG APPLICATION?

While unnecessary in most well-established uses . . . throat lozenges, ointments, nasal preparations . . . new drug applications are still required in selected instances. As experienced producers of antibiotics and pharmaceuticals, we can give reliable assistance in such matters.

TYROCIDINE HYDROCHLORIDE

Previously neglected, this Gram-negative active component of Tyrothricin is being investigated for fungistatic, veterinary and other preparations. We'll gladly supply liberal quantities to be used for research and development purposes. Write Penick today.

PENICK

NYQ *Chemical Division*

S. B. PENICK & COMPANY
100 CHURCH ST., NEW YORK 8
735 W. DIVISION ST., CHICAGO 10

LPG's Still Fair-Haired

Liquefied petroleum gas this year is continuing to be a fair-haired child of the chemical makers. Estimates are that consumption for chemical use will rise 26.2 percent. That would make for a total of 2,396,000,000 gallons.

These figures come from Phillips Petroleum Company, which has just been doing some year-end estimating. The Bartlesville, Okla., firm points out that its figures do not include LPG's consumed in the manufacture of synthetic rubber, which increased 32 percent over 1958 to reach a total of 491 million gallons.

The volumes used for synthetic rubber components and for manufacture of other chemicals are expected to account for more than one-third of the total LPG market, Phillips points out.

An overall estimate indicates that sales this year should increase 16.5 percent over last year, to reach an aggregate of 8,693,000,000 gallons.

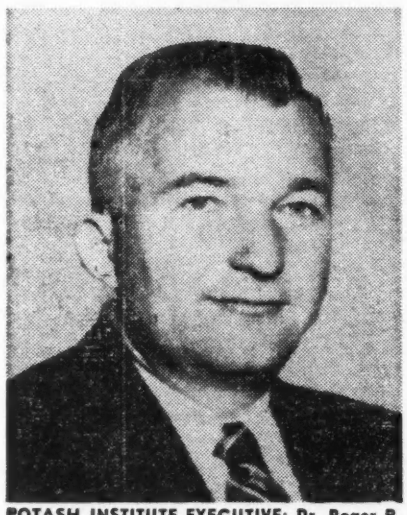
Sales for domestic and commercial uses are estimated at 3,604,000,000 gallons, a 9.4 percent increase over 1958. This continues to be the largest market, although the percentage has dropped from 51.2 percent of total sales in 1954 to an expected 41.5 percent in 1959. The most important factor in domestic growth continues to be house heating, as home owners continue to convert from other fuels to butane and propane.

Sales for motor fuel uses are seen increasing 10 percent to a total of 937 million gallons, with the largest volume again for use in farm tractors. The use of LPG's in industrial

—*Continued on page 59*

Unsaturated Fats and Oils Claims Get Back of the Hand From FDA

Unsaturated fats and oils, which are suddenly being welcomed with open arms by the food faddists and health seekers, are just as suddenly being given the back of the hand by the Food & Drug Administration. Commissioner George P. Larrick is threatening to tag all of them misbranded if their makers insist on telling the public that the products—when added to an otherwise unchanged diet—will reduce blood cholesterol and prevent heart attacks and strokes.



POTASH INSTITUTE EXECUTIVE: Dr. Roger P. Humbert, named director of the western region of the American Potash Institute. Dr. Humbert succeeds M E. McCollam, who is retiring.

With its parent unit, the Department of Health, Education & Welfare, already walloping the cranberry business for indiscriminate application of a weed killer and the chicken and beef industries for the use of stilbestrol, FDA is now having its own inning. It has just laid down a hard statement of law-enforcement policy regarding the unsaturated fats and oils.

Mr. Larrick's Greatest Fear

Mr. Larrick, noting the widespread interest (television is alive with it) in the possible relationship between blood cholesterol levels and heart and artery disease, has made known his greatest fear: Reference to the term cholesterol in the labeling of common foods may imply a special value for preventing or treating these diseases.

Here is a quote from the commissioner:

"Scientific investigations of fatty substances as a possible factor in lowering blood cholesterol and preventing heart

—*Continued on page 62*

DuPont Slates Acid Unit For Its Works in Houston

E. I. duPont de Nemours and Co., will build a multi-million-dollar sulfuric acid plant at Houston, Tex. The new facility will supply acid to a caprolactam plant now being built at Beaumont, by the Wilmington, Del., company.

Part of its output will be available to other chemical makers and to petroleum refiners in the Gulf Coast area. Construction will begin immediately and completion is expected in about a year.

Armour in Joint Venture With Carlo Erba of Italy

Armour Pharmaceutical Company has teamed up with Carlo Erba, an Italian chemical and drug maker, to form Armour-Erba Farmaceutici, SpA, in Milan, Italy.

Named to head the new firm is Count De Visconti, president of the Carlo-Erba concern. Directors are Robert A. Hardt, president of Armour Pharmaceutical; E. J. McAdams, financial vice-president, secretary and treasurer of Armour & Co., and J. A. Gibernau, international director of Armour Pharmaceutical.

MCA Takes a Peek Into 1960 And Finds More Dollar Signs Than BDSA Could Anticipate

When it comes to taking a peek into 1960, Manufacturing Chemists' Association has more dollar signs in its eyes than the Business & Defense Services Administration has. Only a short time ago BDSA came out with an estimate of $27 billion in chemical sales for 1960 (OPD, 12/14/59). Last week MCA came out with its own figures, topping BDSA for optimism. Said MCA: Forecasts are that chemical sales in the next twelve months may go as high as $28 billion.

The trade association bolsters its view with the announcement that the industry is expected to post a sales increase during 1959 of at least $1.6 billion over the previous record year of 1957. Sales should reach a record $25 billion this year, MCA says. BDSA had estimated 1959's figure at $24.8 billion.

A Record Despite Steel Strike

The expected 1959 record is considered especially significant because it was established despite the steel strike, says MCA. Steel producers and fabricators—including automobile manufacturers—are among the largest volume users of chemicals and chemical products.

The expected 1959 sales of $25 billion represent a 6.8 percent increase over the previous record of $23.418 billion set in 1957. Chemical industry sales in 1958 were $23.219 billion, down slightly because of the recession, MCA notes.

Although little change in these statistics is foreseen, the estimated 1959 totals must be considered preliminary figures. Here, according to the Manufacturing Chemists' Association, is the situation:

Sales: Preliminary year-end returns indicate that total sales for 1959 will reach or exceed $25 billion, a new record. Sales for the first ten months averaged more than $2 billion a month. The preliminary figure on October sales totaled approximately $2.208 billion and sales were not expected to fall below this level during the last two months of the year. Second quarter sales of $6.3 billion and third quarter sales of $6.6 billion established new records for these three-month periods.

Profits: During the first half of the year profit after taxes equalled 8.1 percent of sales, compared with 6.6 percent in the first half of 1958 and 7.8 percent in 1957's first half.

Production: The Production Index for Chemicals and Allied Products—as they are listed in federal reports—averaged 207 through the first three quarters while

—*Continued on page 56*

JOINS BOARD: E. J. O'Leary, president and chairman of Ruberoid Company, elected to the board of Cumberland Chemical Corporation. Located at Calvert City, Ky., Cumberland is owned jointly by Ruberoid and Air Reduction Company, New York.

American Lignite to Sell New Montan Wax Grades

American Lignite Products Company, Ione, Calif., has developed a new series of waxes for the carbon paper industry. The products, outgrowths of the company's montan wax research program, are said to be suitable for all types of carbon paper inks.

Commercial availability is soon to be announced for four or five new grades, with additional grades to follow early next year.

Anticipated price range of the entire series runs from 45 cents to 65 cents per pound. Samples, specifications and technical data are being made available by the company from sales offices at 110 East 42nd street, New York 17, and headquarters at Ione, Calif.

DCB Value Increasing And So Is Availability

With its future value as an intermediate increasing, E. I. duPont de Nemours & Co., has just made 1,5-dichloro-2-butene available in commercial quantities. Notes the industrial and biochemicals department of the Wilmington, Del., chemical maker:

"DCB is a clear liquid and contains an exceptionally high amount of the *trans*-isomer—95 to 98 percent by weight. This high purity plus its broad range of reactivity makes it suitable for use in a wide variety of syntheses."

The compound is a "double-barreled" allylic chloride, in addition to having a reactive double bond. Both chlorine atoms undergo reactions typical of allylic halides and in a number of instances allylic

—*Continued on page 60*

Hooker's Chief Executive, R. Lindley Murray, Retires

R. Lindley Murray has retired from active management of Hooker Chemical Corporation, Niagara Falls, N. Y., after more than forty-three years with the company.

In other developments at Hooker, Hal A. Kroeger has been elected a director to fill the vacancy created by the resignation of J. Clark Cassidy, formerly president of Niagara Alkali Company, which has since merged with Hooker. Mr. Kroeger

—*Continued on page 60*

Association Meetings

American Association for the Advancement of Science, annual meeting, Chicago, December 26-31.

American Petroleum Institute, Division of Marketing, lubrication committee meeting, Sheraton-Cadillac hotel, Detroit, Mich., February 25-26; Division of production, southwestern district meeting, Statler-Hilton hotel, Dallas, Tex., March 2-4.

Association of American Soap & Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 20-22.

Association of Consulting Chemists & Chemical Engineers, luncheon meeting, Shelburne hotel, New York, February 9.

Chemical Buyers' Group of National Association of Purchasing Agents, midwinter conference (midwestern and western divisions), Congress hotel, Chicago, January 27-28; midwinter conference (eastern division), Commodore hotel, New York, February 3-4.

Chemical Market Research Association, consumer market research meeting, Lord Baltimore hotel, Baltimore, Md., February 17-18.

Chemurgic Council, annual conference, Sheraton-Park hotel, Washington, D. C., March 16-18.

Chlorine Institute, annual meeting, Commodore hotel, New York, January 20.

Compressed Gas Association, annual meeting, Waldorf-Astoria hotel, New York, January 18-20.

Electrochemical Society, LaSalle hotel, Chicago, May 1-5.

Essential Oil Association, annual meeting, Savoy-Hilton hotel, New York, January 8.

National Drug Trade Conference, annual meeting, Washington hotel, Washington, D. C., January 7.

Natural Gasoline Association of America, Gulf Coast regional meeting, Robert Driscoll hotel, Corpus Christi, Tex., January 22.

Oil Trades Association of New York, dinner meeting, Waldorf-Astoria hotel, New York, January 20.

Pharmaceutical Manufacturers Association, central regional conference, Edgewater Beach hotel, Chicago, February 8-10; western regional conference, Ambassador hotel, Los Angeles, February 15-16; annual meeting, Boca Raton hotel and club, Boca Raton, Fla., April 4-7.

Philadelphia Drug Exchange, annual banquet, Bellevue-Stratford hotel, Philadelphia, January 27.

Salesmen's Association of the American Chemical Industry, installation luncheon, Roosevelt hotel, New York, January 19.

Society of the Plastics Industry, reinforced plastics division conference, Edgewater Beach hotel, Chicago, February 2-4.

Synthetic Organic Chemical Manufacturers Association, monthly luncheon meeting, Roosevelt hotel, New York, January 5.

Toilet Goods Association, scientific section, spring meeting, Waldorf-Astoria hotel, New York, May 11.

Weed Society of America, annual meeting, Cosmopolitan hotel, Denver, Col., February 22-25.

VITAMINS by the TONS

Come RIGHT from ROCHE

- **Vitamin A**
  Palmitate and Acetate
  (liquid and dry forms)
- **Beta Carotene**
  (crystals, suspensions & dry beadlets)
- **Vitamin B_1**
  Thiamine Hydrochloride
  (regular and ampul types)
  Thiamine Mononitrate
- **Vitamin B_2**
  Riboflavin
  (regular and solutions types)
- **Riboflavin-5′-Phosphate Sodium**
- ***dl*-Panthenol** ***d*-Panthenol**
  ***d*-Calcium Panthothenate**
- **Vitamin B_6**
  Pyridoxine Hydrochloride
- **Niacin — Niacinamide**
- **Biotin**
- **Vitamin C**
  l-Ascorbic Acid Sodium *l*-Ascorbate
  Coated *l*-Ascorbic Acid
  Sodium Erythorbate Erythorbic Acid
- **Vitamin E**
  dl-alpha-Tocopherol (yl) Acetate
  dl-alpha-Tocopherol unesterified
  Dry Vitamin E Acetate 33% and 25%

Call ROCHE for VITAMINS

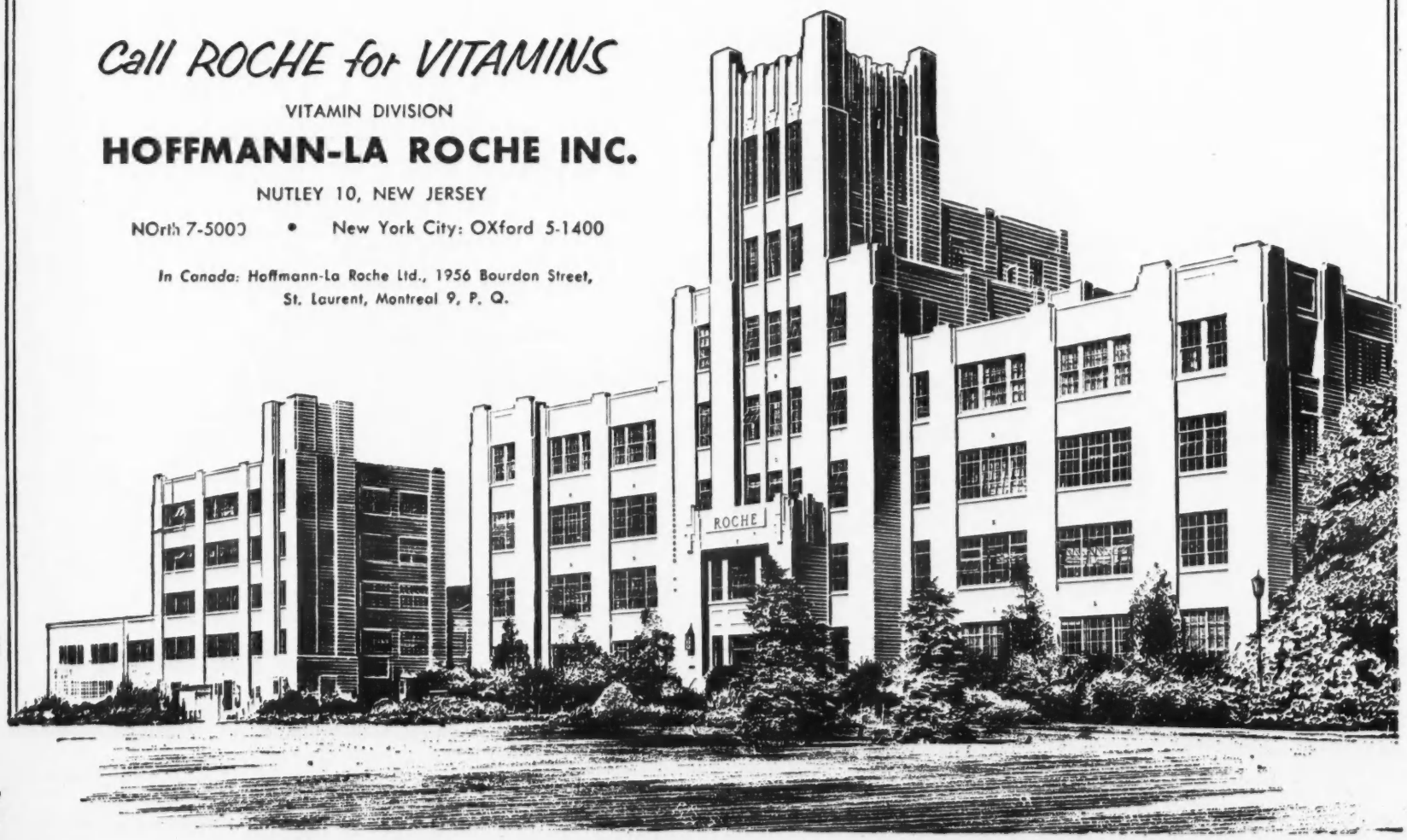
VITAMIN DIVISION

HOFFMANN-LA ROCHE INC.

NUTLEY 10, NEW JERSEY

NOrth 7-5000 • New York City: OXford 5-1400

In Canada: Hoffmann-La Roche Ltd., 1956 Bourdon Street, St. Laurent, Montreal 9, P. Q.



CHEMICALS AND RELATED MATERIALS

All matters under this heading fully protected by copyright.

Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, Dec. 18 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Abies siberica oil, cns ..... lb. 2.45 - 3.00
Acacia (see Arabic gum).
Acenaphthene, below 92.5 C. m.p., dms., works lb. .40 - —
Above 92.5 C. m.p., bbls. dms., works lb. .41 - .50
Acetaldehyde, 99% dms., c.l., works, lb. .12 - —
dms., l.c.l., works ..... lb. .13½- —
tanks, works ..... lb. .10 - —
Acetaldol (see Aldol)
Acetanilide, tech., flaked, bbls., bgs., c.l., frt alld lb. .32½- —
bbls., bgs., ton lots, frt. alld. lb. .33½- —
bbls., bgs., smaller lots, frt. alld lb. .36½- —
USP bbls. 225-lb dms any quantity lb. .79 - —
100-lb. dms., any quantity lb. .81 - —
Acetic acid, coml. or redist., 23%, bbls 100 lbs 4.80 - —
56%, bbls. ..... 100 lbs 8.25 - —
70%, bbls. ..... 100 lbs 9.95 - —
80%, bbls. ..... 100 lbs 10 45 - —
Acetic acid, glacial, syn., CP, dms., dlvd 100 lbs. 22.00 -23.00
tech., dms., c.l., dlvd. ... 100 lbs. 13 75 - —
dms., l.c.l., dlvd. ..... 100 lbs. 15.25 - —
tanks, dlvd ..... 100 lbs. 10.00 —
USP, cbys., dlvd ..... 100 lbs. 31.00 -32.00
Acetic anhydride, aluminum ret. dms., c.l., dlvd. E lb. .16½- —
aluminum ret dms., l.c.l., dlvd E. lb. .18 - —
tanks, dlvd. E. ..... lb. .14 - —
Acetoacetanilide, fib. dms., c.l., dlvd lb. .80 - —
fib dms., l.c.l., dlvd. ... lb. .81 - —
Acetoacet-o-chloroanilide, fib. dms., c.l., dlvd lb. 1.35 - —
fib. dms., l.c.l., dlvd. ..... lb. 1.36 - —
Acetoacet-o-toluidide fib. dms., c.l., dlvd lb. .82 - —
fib. dms., l.c.l. dlvd. ..... lb. .83 - —
Acetone, CP, dms., c.l., dlvd. . lb. .11 - —
dms., l.c.l., dlvd ..... lb. .12½- —
tanks, dlvd ..... lb. .08½- —
Acetonitrile, dms., c.l., works... lb. .45 - —
dms., l.c.l., works ..... lb. .45¾- —
tanks, works ..... lb. .43 - —
Acetophenetidin, USP, 200-lb. dm., 1,000 lbs., frt. alld lb. 1.22 - —
100-lb. dm., 1,000 lbs., frt. alld. lb. 1.24 - —
Acetophenone, cns., dms. ..... lb. .42 - 1.30
Tech., dms, c.l., works ..... lb. .37 - —
dms., l.c.l., works ..... lb. .37¾- —
tanks, works ..... lb. .35 - —
N-Acetyl-p-aminophenol. 1,000-lb. lots, frt. adjusted lb. 1.45 - —
smaller lots, dms., same basis lb. 1.55 - 1.63
Acetylene black, imp., bgs., c.l., duty and freight ext., a lb. .19 - —
cs., l.c.l., ex whse. ..... lb. .24½- .30
Acetylsalicylic acid, USP, special, makers, primary distr., bbls., 1,000-lb. lots, point of shipt lb. .63½- —
USP, standard, fine, cryst. gran., (20-40 mesh) powd., (80 mesh), 250-lb. bbls., c.l., t.l., same basis lb. .55¼- —
Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich., Chicago and St. Louis.
Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .35½- —
non-ret. dms., l.c.l., frt alld. E. of Denver lb. .36½- —
tanks, frt. alld. E. of Denver, lb. .33 - —
Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39½- —
non-ret. dms., l.c.l., frt. alld. E. of Denver lb. .40½- —
tanks, frt. alld. E. of Denver lb. .37 - —

ACIDS

Acid quotations are listed individually. For example, prices on Acid, cresylic, may be found in the C's under Cresylic acid.

Aconite root, bls. ..... lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .51 - —
dms., l.c.l., works ..... lb. .51¾- —
tanks, works ..... lb. .46 - —
Acrylamide, dms., t.l., f.o.b. works, lb. .58 - —
dms., l.t.l., same basis ..... lb. .60 - —
Acrylic acid, glacial, dms., c.l., t.l., frt. alld. lb. .57 - —
dms., l.c.l., l.t.l., frt. alld... lb. .58 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .2949- .2950
dms., l.c.l., l.t.l., frt. alld..... lb. .3049- .3050
tanks, frt. equald..... lb. .2649- —

Abies Siberica Oil—Ammonium Bifluoride

Adeps lanae (see lanolin).
Adipic acid, bgs., c.l. dlvd. ..... lb. .32¼- —
bgs. l.c.l. dlvd. ..... lb. .35 - —
Agar USP Kobe No 1, strip bls. lb. 2.10 - —
powd., 30 mesh., fib. dms lb. 2.40 - —
dl-Alanine, dms., 100-lbs or more, f.o.b. works lb. 5.25 - —
dms. 1-99 lbs., same basis lb. 10.00 - —
Aldol, 95%, dms., l.c.l., works lb. .23 - —
Aldrin tech. fib. dms. c.l., t.l., dlvd lb. .99 - —
fib. dms., l.c.l., dlvd ..... lb. 1.04 - —

ALCOHOLS

Alcohol quotations are listed individually. For example, prices on Alcohol, furfuryl, may be found in the F's under Furfuryl alcohol.

Aletris root, bgs. ..... lb 1.75 1.85
Algin (see Sodium alginate)
Alizarin (see 1,2-Dihydroxy anthraquinone).
Alkali blue drv. 250-lb. bbls., dlvd. E of Rockies lb 2.38 - —
Alkali blue, toner, litho flushed, 125-lb. bbls. same basis. lb. 1.35 - —
Alkali blue prices 1c. higher W of Rockies
Allethrin, 90% dms., frt. alld lb. 28.80 -28.90
Soln. 20% dms. 200-2,000 lb. lots, frt. alld lb 6.50 6.55
2½% dms. frt. alld. lb .95 1.10
Allspice oil (see Pimento oil).
Allyl alcohol dms., c.l. dlvd. ... lb 32½- —
dms., l.c.l. dlvd ..... lb. .34 - —
tanks, dlvd. lb. .30 - —
Allyl bromide 55-lb. cbys. 5,005 lbs. or more works lb 1.47 - —
55 lb. cbys., 1,045 to 4,950 lbs., works lb 1.52 - —
55-lb cbys. 55 to 990 lbs. works. lb 1.57 - —
Allyl chloride, dms. c.l. dlvd. lb. 17½- —
dms., l.c.l., dlvd ..... lb. .19 - —
tanks, dlvd lb. .15 - —
Allyl isocyanate (see Mustard Oil, syn.)
Almond oil artif., bitter (see Benzaldehyde)
Almond oil nat., bitter t.p.a. bots. lb 2.75 3.45
NF, bots lb 3.00 3.30
sweet, USP, cns., dms ..... lb. .70 1.20

Abbreviations

Used in OPD Market Quotations

alld	allowed
amorph	amorphous
AMP	American melting point
anhyd.	anhydrous
AOAC	Association of Official Agricultural Chemists
a.p.a	available phosphoric acid
approx.	approximately
artif.	artificial
ASTM	American Society for Testing Materials
Atl.	Atlantic
Be.	Baume
bbls.	barrels
bgs.	bags
bls.	bales
bots.	bottles
b.p.	boiling point
b.p.l.	bone phosphate of lime
b.r.	boiling range
bxs.	boxes
C.	centigrade
cbys.	carboys
CD	completely denatured
c.i.f.	cost, insurance, freight
cks.	casks
c.l.	carlots
cns.	cans
coml.	commercial
conc.	concentrated
CP	chemically pure
cps.	centipoises
cryst.	crystalline
cs.	cases
ctns.	cartons
cyls.	cylinders
d-	dextro
dbl.	double
denat.	denatured
dest-dist	destructively—distilled
dl-	dextrolaevo
dist.	distilled
distr.	distributor
djns.	demijohns
dlvd.	delivered
dms.	drums
dom.	domestic
E	east
e.p.	end point
equald.	equalized
exp.	expressed
Ext.	external
F.	fahrenheit
ferment.	fermentation
f.f.a.	free fatty acid
f.f.c.	free from chlorine
fib.	fiber
f.o.b.	free on board
f.p.a.	free of prussic acid
frt.	freight
gal.	gallon
gran.	granular
grd.	ground
I &a.	iron and aluminum
i.b.p.	initial boiling point
imp.	imported
incl.	included
indust.	industrial
kgs.	kegs
l-	laevo
lacq.	lacquer
lb.	pound
l.c.l.	less than carlots
l.t.l.	less truckload
liq.	liquid
mfrs.	manufacturers
m-	meta
m.a.p	mixed aniline point
min.	minimum
m.p.	melting point
N-	nitrogen
n-	normal
nat.	natural
neut.	neutral
NF	National Formulary
NNR	New and Nonofficial Remedies
No.	number
nom.	nominal
o-	ortho
ord.	ordinary
oz.	ounce
p-	para
Pac.	Pacific
pf.	proof
phos.	phosphate
photo.	photographic
pkgs.	packages
powd.	powdered
precip.	precipitated
prod.	producer
pt.	point
pulv.	pulverized
purif.	purified
redist.	redistilled
refd.	refined
refy.	refinery
reg.	regular
resub.	resublimed
ret.	returnable
SD	specially denatured
s.d.	single distilled
S.E.	southeast
sec.	secondary
secs.	seconds
s.g.	specific gravity
shipt.	shipment
soln.	solution
s.u.	standard unit
syn.	synthetic
tanks.	railroad tankcars
tech.	technical
tert-	tertiary
t.l.	truck loads
t.w.	tank wagons
USP	U. S. Pharmacopoeia
vis.	viscosity
VM&P	varnish makers & painters
W.	west
whse.	warehouse
w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material

Aloe, Cape, cs. ..... lb. .33 - .40
powd., cs. ..... lb. .60 - .70
Curacao kgs. ..... lb. .60 - .70
powd. kgs. ..... lb 80 —
Aloin USP bbls. dms. kgs. ... lb 3.25 3.75
Alphanaphthol (see a-Naphthol)
Alphanaphthylamine (see a-Naphthylamine)
Alphanitronaphthalene (see a-Nitronaphthalene)
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium gran bgs., works 100 lbs. 4.30 - —
lump, dms., works ... 100 lbs 5.05 - —
powd., dms., works ... 100 lbs. 5.20 - —
USP, burnt dms. ..... lb. .20 .21
hydrous dms. ..... lb. .07¾- .08
Alum, potassium gran. bgs. works. 100 lbs. 4.55 - —
lump, dms., works ..... 100 lbs. 5.30 - —
powd., dms., works ... 100 lbs. 5.45 - —
USP, burnt., dms ..... lb. .20 .21
USP, hydrous, dms ..... lb. .07¾- .08
Alum, potash-chrome, dms. ..... lb. .17 - —
Alumina, calcined bgs., c.l., works. lb. .05 - —
bgs., l.c.l., works ..... lb. .05¼- .06
Aluminum acetate, basic soln., 24%, bbls. l.c.l., works lb. .14 - —
Aluminum chloride, coml., anhyd., dms., c.l., works, frt. equald lb. .16 - —
dms., l.c.l., works ..... lb. .16½- —
cryst., dms., c.l. works 100 lbs. 21.00 - —
dms., l.c.l., works 100 lbs. 21.50 - —
Soln., 32° cybs., c.l., works.... lb. .0495- —
cbys., l.c.l., works ..... lb. .0570- .1095
tanks, works ..... 100 lbs. 3.95 - —
NF, gran., dms., works ..... lb. .31 - .33
Aluminum fluoride, tech., anhyd., bgs., c.l., works lb. .17¼ —
bgs., l.c.l., works ..... lb. .18¼- .20¼
bulk, c.l., basis 80% ..... lb. .14½- —
Aluminum fluoride in fib. dms. 0.35c. per lb. higher
Aluminum formate, basic soln., containers extra c.l., works. 100 lbs. 11.00 - —
containers extra l.c.l. works. 100 lbs. 11.50 - —
Aluminum hydrate heavy, bgs., c.l., frt. equald lb. .03½- —
bgs. 20,000-40,000 lb lots, same basis lb. .03¾- —
bgs., 2,000-20,000 lb lots, same basis lb. .04¼- —
bulk, c.l., same basis lb. .03¼- —
Aluminum hydroxide, dried, USP XV, t.b dms., works lb. .82½- —
fib dms., contract, works lb. .79½- —
Aluminum hydroxide, gel, pharmaceutical, 14-15% Al_2O_3, fib. dms., works lb. .22 - —
9-9½% Al_2O_3, fib dms., works lb. .19 - —
fib dms., contract, works lb. .18 - —
Aluminum hydroxide, tech., powd. (See Aluminum hydrate).
Aluminum metal, 99%+ ingots, 10,000-lb. lots, frt. alld. lb. .2810- —
pigs, 10,000-lb. lots, frt. alld lb. .26 - —
Aluminum oxide, amorphous (See Alumina, calcined)
Aluminum paste, lining, extra-fine, dms lb. .69½- —
Standard grade, dms. lb. .47 - —
Aluminum powder, lining, extra-fine, dms lb 1.11 - —
Standard grade, dms lb .81 - —
Aluminum paste and powder prices f.o.b. shipping point. Add 1c per lb. for 100-lb dm., 1½c per lb for 50-lb dm., 3c. per lb for 10 lb. can and 5c. to 12c per lb. for smaller containers. Deduct 1c per lb for single shipment of 400 to 1,499 lbs., 2c for 1,500 to 4,999 lbs., 3c for 5,000 to 29,999 lbs and 4c for 30,000 lbs or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs or over
Aluminum resinate, precip., 2.1% Al, dms. lb. .36¼- —
Aluminum stearate, dibasic, ctns., c.l lb. .39 - —
ctns., l.c.l ..... lb. .40 - .44
Monobasic, ctns., c.l. ..... lb. .39 - —
ctns., l.c.l. ..... lb. .40 - .44
Tribasic, ctns. c.l ..... lb. .39 - —
ctns., l.c.l ..... lb 40 - .44
Aluminum sulfate, coml., grd., bgs. c.l. works, frt equald ton. 41.00 - —
bulk, c.l., same basis .... ton. 40.00 - —
lump, bgs., c.l. same basis ton. 44 00 - —
iron-free, bgs., c.l., works, frt equald 100 lbs. 3.80 - —
bgs. l.c.l. works, frt. equald. 100 lbs. 4.30 - 8.30
USP, gran., dms., works lb. .30 - —
USP, powd., dms., works ... lb. .27 - —
Aluminum sulfate prices $1 per ton higher in the South
Aluminum trihydrate, heavy (see Aluminum hydrate, heavy).
Ambergris, gray, bots ..... oz. 6.50 -10.00
p-Aminoacetanilide tech., paste, dms., frt alld lb. 1.57 - —
Aminoacetic acid NF, bbls., frt. adjusted lb. 1.50 1.73
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
p-Aminobenzoic acid, tech., dry, dms., works lb. 1.72 - —
2-Amino-4-chlorophenol, tech. solid, dms. frt. alld lb. 8.10 - —
p-Aminodiphenylamine, tech., solid, dms., frt. alld lb. 3.00 - —
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 - —
dms., l.c.l. dlvd ..... lb. .49 - —
tanks, dlvd. ..... lb. .45 - —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 - —
dms., l.c.l., frt. alld. ..... lb. .45 - —
tanks, frt. alld. ..... lb. .42 - —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 - —
dms., smaller lots. ..... lb. 2.50 - —
p-Aminophenol, dms., frt. alld. lb. 1.15 - —
Aminophylline, USP, 100-lb. dm., frt. alld lb. 3.25 - —
p-Aminosalicylic acid, dms., 100 lbs. or more, frt. adjusted lb. 3.40 - —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald, E. of Rockies ton. 36.00 - —
refrigeration, tanks, works, frt. equald E. of Rockies ton. 38.50 - —
Aqueous, 29.4%, tanks, works, anhyd. basis, E. of Rockies. ton. 89.00 - —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal gray, bgs., c.l., works, frt. equald 100 lbs. 8.25 - —
bgs., l.c.l., same basis 100 lbs. 8 65 -12.05
Ammoniac, sal., white (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .40 - —
Ammonium benzoate, USP, fib. dms. ton lots, works lb. 1.00 - —
fib dms. 1,000-lb lots, works. lb. 1.05 - —
Ammonium biborate, gran., dms., c.l., works ton. 325.00 - —
dms., ton lots, ex whse. 100 lbs. 20.40 - —
dms., smaller lots, ex whse. 100 lbs. 21.15 - —
Ammonium bicarbonate, dom., dms., c.l., works 100 lbs. 7.00 - —
dms., l.c.l., works ..... 100 lbs. 9.00 - —
Ammonium bichromate, dms., works. lb 42 .43
Ammonium bifluoride dms. dlvd lb. .2145- .2245

Ammonium bromide, NF, gran., dms., c.l., t.l., frt. equald lb. .44 - —
dms. l.c.l., same basis lb. .46 - —
Ammonium carbonate, USP, lump, dms. c.l lb .15½- —
Ammonium chloride, white, tech., fine gran., bgs., c.l. works 100 lbs 5.75 —
bgs l.c.l., works 100 lbs 7.75 - 8.20
USP gran fib dms lb .17¼ —
Ammonium citrate dibasic, 250-lb. dm. f.o.b works lb .77 - —
Ammonium dichromate (see Ammonium bichromate)
Ammonium fluoride (see Ammonium bifluoride).
Ammonium gluconate tech. 200-lb. dm. f.o.b works E lb. .45 - —
Ammonium hydroxide (see Ammonia aqueous).
Ammonium iodide NF, 25-lb. jar, f.o.b works lb 4.26 - —
Ammonium lauryl sulfate, dms., c.l., frt. alld lb. .20½- —
dms., t.l.l. frt alld lb. .21½- —
tanks, frt alld lb. .19½- —
Ammonium lignin sulfonate bgs., c.l., works 100 lbs 3.25 —
bgs., l.c.l., works 100 lbs 3.40 - 3.65
Ammonium linoleate, 80%, dms., works lb. .50 - .55
Ammonium molybdate, CP, cryst., fib dms., 15,000 lbs works lb 1.22 - —
fib dms, 2,000-lb contracts, works lb 1.23 - —
single fib. dms., works lb 1.24 - —

Ammonium nitrate, dom fertilizer grade, 33.5% N, bags, f.o.b. works ton.67.00 - —
with dolomite, 20.5% N, bgs., c.l., Hopewell, Va ton.48.00 - —
Imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $3 ton base price ton.67.00 - —
Ammonium oxalate, tech., fine gran. 250-lb. dm. f.o.b. works E lb. .28½- —
Tech., powd., 200-lb. dm., same basis lb. .28½- —
Ammonium pentaborate, gran., bgs., c.l., works ton 193.00 - —
bgs., ton lots, ex whse 100 lbs.14.23 - —
bgs., smaller lots, ex whse 100 lbs.15.48 -17.48
Ammonium pentaborate powder $10 per ton higher in bags.
Ammonium persulfate, tech., dms., 10-ton lots or more, works. lb. .18 - —
dms., smaller lots, works lb. .20 - .23
Ammonium phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
bgs., l.c.l., same basis lb. .10 - —
Dibasic, NF, V, bbls., dms lb. .46 - —
Dibasic, tech., bgs., c.l., works, frt. alld lb. .09¼- —
Ammonium silicofluoride, dms., works lb. .11¾- .13¼

Ammonium sulfamate bgs., c.l., t.l., works lb. .19 - —
bgs., l.c.l. works lb. .20¼- .27
Ammonium sulfate standard granular bulk, f.o.b works base price ton.32.00 - —
purif., bgs., f.o.b. works lb .08½- .15
Large granular, bulk, c.l., works. ton.35.00 - —
bgs., c.l., works ton 40.00 - —
Tech., bulk c.l., t.l., works ton 52.00 - —
bgs., c.l., t.l., works ton 56.00 - —
bgs., l.c.l. t.t.l., works—100 lbs 3.20 - 7.20
Ammonium sulfide, nq., 40-44%, tanks, frt., equald.,100% basis ton.160.00 - —
Ammonium sulfocyanide, tech (see Ammonium thiocyanate).
Ammonium thiocyanate, tech., cryst. dms., c.l., works lb. .20 - —
dms. l.c.l. works lb. .22 - .26
Tech., soln., 50%, tanks, frt. equald., basis ammonium thiocyanate content lb. .17¼- —
Ammonium thioglycollate, coml., chys., 100% basis lb. 1.35 - 1.65
Highly purif., chys 100% basis. lb. 1.70 1.96
d-Amphetamine hydrochloride, monobasic, dms. lb.17.50 -23.50
dl-Amphetamine hydrochloride, dibasic, dms lb. 4.50 - 6.00
d-Amphetamine phosphate, fib dms., 100-lb lots lb.15.00 —
dl-Amphetamine phosphate, dms.lb. 4.20 - 5.60
d-Amphetamine sulfate, fib dms., lb.15.00 -17.00
dl-Amphetamine sulfate, fib. dms., lb. 4.20 - 5.60

Amyl acetate, ex fusel oil, tech., dist., from 125° to 150°C., dms., c.l., frt. alld E of Rockies lb. .18¼- .19
dms., l.c.l., same basis lb. .20 - .20¼
tanks, same basis lb. .16 - .16½
Ex pentane, reg., dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .21½- —
tanks, dlvd. lb. .16½- —
tech., dms., c.l., dlvd. lb. .17 - —
dms., l.c.l., dlvd lb. .18½- —
tanks, dlvd. lb. .14½- —
Syn., oxo process, dms., c.l., dlvd. lb. .19 - —
dms., l.c.l., dlvd lb. .20½- —
tanks, dlvd. lb. .16½- —
Amyl alcohol, ex fusel oil (see Fusel oil refd.).
Amyl alcohol, ferment, refd., 128°-132°C., dms., l.c.l., dlvd lb. .43½- —
refd., ACS grade, dms., l.c.l., dlvd lb. .45½- —
Amyl alcohol, ex pentane, mixed, amyls, dms., c.l., frt. alld. lb. .19 - —
dms., l.c.l. frt. alld lb. .20½- —
tanks, frt. alld lb. .16½- —
primary, dms. c.l., frt. alld. lb. .19¾ .20¼
dms., l.c.l. frt. alld lb. .21¼- .21¾
tanks, frt. alld lb. .17¼- .17¾
sec-synthetic, dms. c.l., works, frt. alld lb. .19 - —
dms., l.c.l., works lb. .20½- —
tanks, works. lb. .17 - —
tert-synthetic, dms. c.l., frt. alld. E lb. .17 - —
dms., l.c.l., frt. alld. E lb. .18½- —
tanks, frt. alld E lb. .14½- —
Amyl alcohol, 1-pentanol (syn. normal), dms., c.l., works lb. .41½- —
dms., l.c.l., works lb. .43 - —
tanks works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 - —
dms., l.c.l., works lb. .70 - —
tanks, works lb. .60 - —
Amyl n-butyrate, dms. lb 1.00 1.25
Amyl cinnamic aldehyde, dms lb. 1.70 - 2.20
p-tert Amyl phenol dms. c.l. works. lb .26¾ —
dms. l.c.l., works lb. .27¾ —
Amyl salicylate, cns., dms lb. .73 1.08
Amyris oil, dms lb 1.50 1.90
Anethole, tech., dms. lb. .92 - 1.00
USP, cns., dms. lb. 1.12 - —
Angelica root, bls. lb .90 1.00
Angelica root oil, bots lb 120.00 140.00
Angelica seed oil, bots lb 120.00 130.00
Aniline dms., c.l., frt alld lb .20 - —
dms., l.c.l. frt. alld lb .21 - —
tanks frt alld lb .18 - —
Aniline oil (see Aniline)
Aniline salt, dms., c.l., truckloads, 20,000 lbs min. frt alld. lb. .33 - —
dms. l.c.l., same basis lb. .35 - —
Anise oil, USP, dms. lb 1.75 3.00
Anise seed, Mexican, bgs lb .22 —
Spanish, bgs. lb. .16½- —
Anisic aldehyde, dms lb. 1.50 - 2.10
o-Anisidine, dms. c.l. frt alld lb. .30 - —
dms., l.c.l. same basis lb. .32 - —
tanks, same basis lb. .78 - —
p-Anisidine, dms. works lb. .97 - —
Anthracene, 90-95%, dms. c.l., t.l., f.o.b. works lb. .42½- —
dms., l.c.l., minimum shipment 1,000 lbs., same basis lb. .45 - —
Anthranilic acid, 99% 150-lb dms., dlvd lb. 1.15 - —
Anthraquinone, 99.5% bbls., c.l., frt alld lb. .33 - —
bbls. l.c.l., same basis lb. .36 - —
Electrical grade, bbls, l.c.l., same basis lb. 1.10 - —
Antimony butter (see Antimony trichloride).
Antimony metal, bulk, c.l., mines, cs. c.l. mines lb. .29 —
lb. .29½- —
Antimony oxide, bgs. c.l. frt alld. lb. .24½- —
bgs. l.c.l., frt alld. lb. .26 - —
Prices of antimony oxide are 2c higher west of the Rockies.
Antimony sulfide, approx 65%, bgs., 10,000-lb lots, dlvd lb 23 —
bgs. smaller lots, dlvd lb. 24 - .26
Antimony trichloride, anhyd., solid, pails, c.l., works lb. .41 - —
pails, l.c.l. works lb. .43 - —
Antimony-potassium tartrate, tech., powd., 250-lb. dm., f.o.b. works, E lb. .60½- —
USP, powd., 250-lb dm., same basis lb. .74½- —
Apomorphine hydrochloride, USP, bots., 25-oz. lots oz.35.60 - —
Apricot kernel oil, USP, dms lb. .70 - 1.25
Arabic gum, amber sorts, 10 bgs. lb. .29 - —
USP, powd., bbls lb. .33 - —
Areca nuts, powd. bbls. lb 13 - —
Arecoline hydrobromide, NF, bots., tins oz. 4.00 - —
l-Arginine, free base, dms. 10-kilo lots or more kilo 90.00 - —
l-Arginine glutamate, dms., 10-kilo lots or more kilo 60.00 - —
l-Arginine monohydrochloride, dms., 10-kilo lots or more kilo.60.00 - —
Arnica flowers (true Montana), bls lb. .75 - —
Aromatic petroleum solvents—See Solvent Naphtha, petroleum, aromatic
Arsenic, crude 95%, bulk, c.l., works lb. .016 - —
bbls., c.l., works lb. .031 - —
Arsenic trioxide, USP, dms lb. .48 - —
Arsenic, white, powd., bbls., c.l., works lb. .04½- —
bbls. l.c.l., works lb. .06½- .07⅛
Arsenous acid, tech (see Arsenic, white).
Arsenous acid, USP (see Arsenic trioxide).
Arylid maroons, deep shades, bbls. lb 3.70 - —
Light shades, bbls. lb 2.85 - —
Asafetida gum, cns lb .36 - .40
Powd., bbls, dms lb .75 - .80
Asbestine (see Talc, fibrous, New York).
Asbestos, Canadian crude
6D, c.l. (30 tons) mines ton 86.00 - —
7D, c.l. (30 tons) mines ton 75.00 - —
7F, c.l. (30 tons) mines ton 71.00 - —
7H, c.l. (30 tons) mines ton 61.00 - —
7K, c.l. (30 tons) mines ton 50.00 - —
7M, c.l. (30 tons) mines ton 44.00 - —
7R, c.l. (30 tons) mines ton 43.00 - —
7RF, c.l. (30 tons) mines ton 44.00 - —
7T, c.l. (30 tons) mines ton 41.00 - —
7TF, c.l. (30 tons) mines ton 44.00 - —
Ashestos prices are in Canadian funds; l.c.l. lots $4 per ton higher
Ascorbic acid, USP, 25, 50-kilo dms., kilo.10.00 - —
10 kilo dms. kilo 10.25 - —
5-kilo dms. kilo.10.75 - —
1-kilo bottle kilo 11.00 - —
500-gram bottle kilo.11.50 - —
Ash black (see Barium sulfide).
Asphalt, gilsonite, black jet, bgs., c.l., mines ton 40.00 - —
ex-whse, N. Y., N. J ton 86.50 - —
seconds, 300°-390°F. fusing pt. bgs., c.l., mines ton.35.00 - —
select, 350°F. fusing pt., bgs., c.l., mines ton.41.00 - —
270°-295°F. fusing pt., bgs., c.l., mines ton 40.00 - —
Manjak No. 10 crude, dms., works lb .07 - —

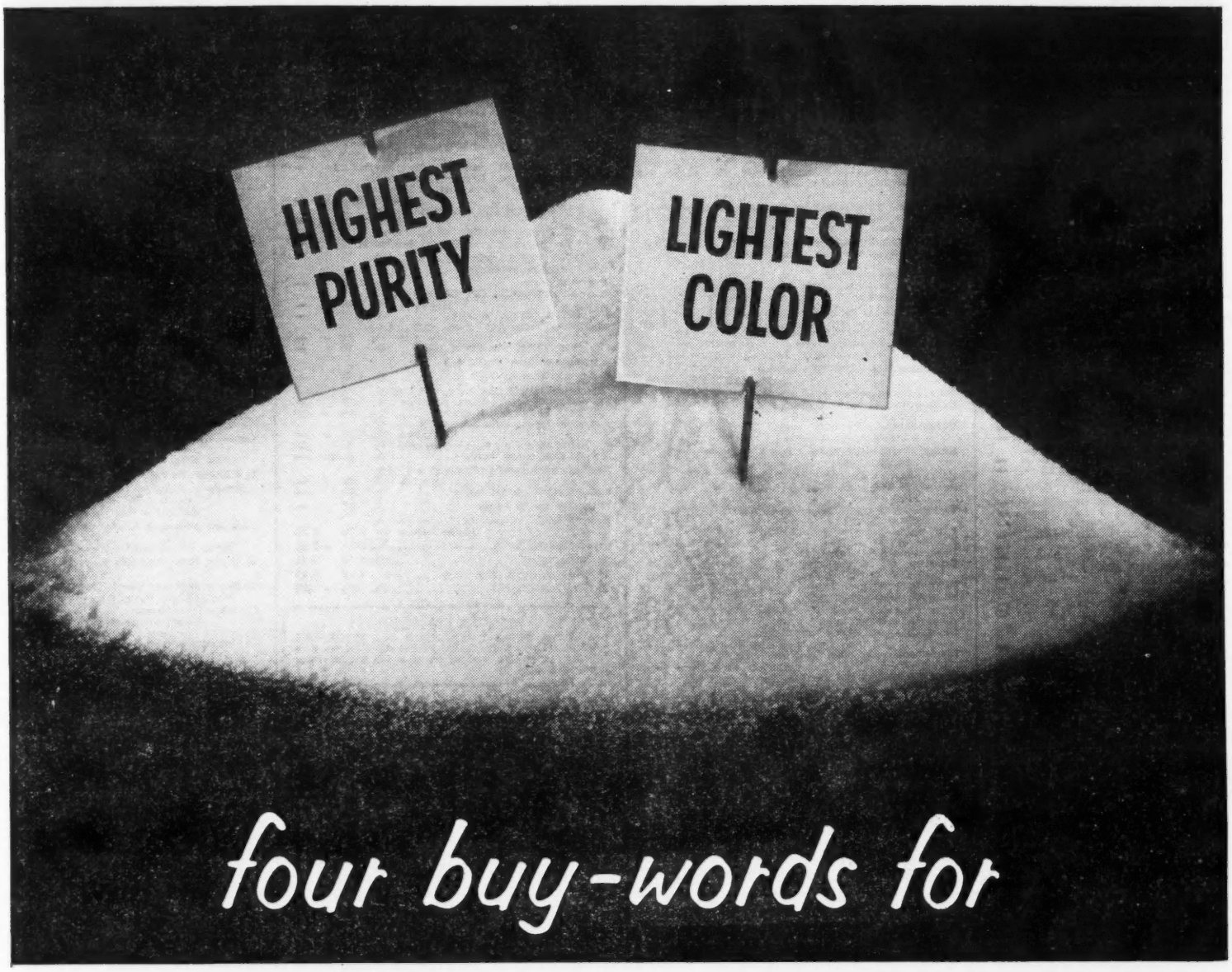
no IFS & &'s or BUTS

YOU CAN DEPEND ON PUBLICKER...

FOR UNIFORM QUALITY
STEADY SUPPLY
PROMPT DELIVERY

ETHYL ALCOHOL — ACETONE
ETHYL ACETATE — ACETALDEHYDE
BUTYL ALCOHOL — ACETIC ACID
BUTYL ACETATE — AMYL ACETATE
N-BUTYL CHLORIDE — REFINED FUSEL OIL
ISOAMYL ALCOHOL

PUBLICKER INDUSTRIES Inc.
1429 WALNUT STREET, PHILADELPHIA 2, PA.
NEW YORK • NEW ENGLAND • PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
MIDWESTERN DISTRIBUTORS, PUBLICKER CHEMICAL CORP.
PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022
CHICAGO—RANDOLPH 6-6678



NATIONAL® ADIPIC ACID

Our large-volume production of NATIONAL ADIPIC ACID is continuously analyzed to be certain that every shipment conforms to our tough specification on APHA color and to our consistent high-purity standard.

Result: Users of NATIONAL ADIPIC ACID are sure of receiving specification-grade material with predictable performance in their light-colored plasticizers, resins, alkyds or other monomeric or polymeric esters.

If you haven't received a working sample and a copy of our current Adipic Acid shipping specification, we'll be glad to furnish them . . . and to quote on your needs. Write or phone our nearest office.

NATIONAL ANILINE DIVISION
40 RECTOR STREET, NEW YORK 6, N. Y.
Atlanta Boston Charlotte Chicago Greensboro Los Angeles
Philadelphia Portland, Ore. Providence San Francisco
In Canada: ALLIED CHEMICAL CANADA, LTD., 100 North Queen St., Toronto 18
Distributors throughout the world. For information:
ALLIED CHEMICAL INTERNATIONAL • 40 Rector St., New York 6, N. Y.

Allied Chemical

Asphalt, petroleum, cut-back, tanks, tankwagon, refy. gal. .09½- —
emulsion tanks tankwagon refy. gal. 09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy. ton 21.00 - —
85-100 penetration tanks, tank wagon refy ton 20.00 - -
Aspirin (see Acetylsalicylic Acid)
Atropine NF tins oz 5.75 6.50
Atropine sulfate USP bots oz 5.25 5.75
Avocado oil, cns., f.o.b. Calif. lb. 2.25 - 3.00

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. 65 - —
less than 1,000,000,000 units 50,000 units 70 - —
Balm of Gilead buds dried bgs lb 1.25 1.35
Barberry root bark, bgs. lb. 1.00- 1.25
Barbital, NF 100-lb dms lb 4.56 - —
Barbital sodium NF dms lb 4.75 - —
Barium carbonate, precip., bgs., c.l., works ton 111.50 - —
bgs., smaller lots works ton 126.50 - —
Barium chlorate, dms., works lb .32 - .41
Barium chloride, anhyd., bgs., c.l., works ton 176.00 - —
bgs., c.l., works ton 196.00 - —
NF, cryst., 100 lb. dms lb. .22 - —
Tech., cryst., bgs., c.l., works 100 lbs 7.00 - —
bgs., l.c.l., works 100 lbs 8.00 - —
Barium chromate, bgs., frt. equald lb .38 - —
Barium dioxide (see Barium peroxide)
Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 208.00 - —
bgs., l.c.l., t.l.l., frt. equald ton 218.00 - —
Barium monohydrate, 99% bgs., c.l., frt equald 100 lbs. 11.25 - —
bgs., l.c.l., frt. equald 100 lbs. 11.75 - —
Barium monoxide (see Barium oxide)
Barium nitrate bbls., c.l., t.l., dlvd lb. .16 - —
bbls., l.c.l., t.l.l., dlvd lb. .17 - —
Barium oxide, grd., dms., c.l., t.l., frt equald ton 275.00 - —
dms., l.c.l., t.l.l., frt. equald, ton 285.00 - —
Barium peroxide dms., frt equald, lb. .20 - —
Barium stearate, ctns., c.l., frt alld, lb. .41 - —
ctns., l.c.l., same basis lb. .42 - .46
Barium sulfate, tech (see Barytes and blanc fixe)
Barium sulfate, X-ray, 100-lb dm., lb. .19½- —
Barium sulfide, dms., c.l., works ton 100.00 - —
dms., l.c.l., works ton 110.00 - —
Barytes, southern off-color, bgs., mines ton 25.00 - —
95-75% bgs., mines ton 25.00 - —
white water-grd., paper bgs., c.l., St. Louis ton 55.00 - 55.25
paper bgs., ex whse., New York ton 79.85 - —
Battery acid, chys., c.l. works, E. 100 lbs 2.35 - —
chys., l.c.l., works, E. 100 lbs 2.65 - 10.95
Bauxite, bulk, mines ton 7.00 - 10.00
Bay oil, NF, Puerto Rican, 50-55% cns lb. 1.95 - 2.70
55-60% cns lb 2.50 - 3.05
NF, West Indian, 50-55%, cns., dms lb 2.35 - —
Bayberry wax, bgs lb. .45 - .50
Beeswax, crude, African, bgs lb. .53 - .55
Brazilian, bgs. lb. .58 Nom.
Central American, bgs lb. Nom.
Chilean, bgs. lb. .59 Nom.
Refd., USP, bleached white, bricks, 100-lb ctns lb .69 .71
white, slabs, 100-lb. ctns lb. .68 - .70
yellow, bricks, 100-lb. ctns lb. .59 - .61
yellow, slabs, 100-lb. ctns lb. .58 - .60
Belladonna leaf, bls. lb. .26 - —
Belladonna root, bls. lb. .28 - —
Bentonite, dom 200 mesh, bgs., c.l., mines ton 14.00 - —
imp Italian white high gel., bgs., 5-ton lots, ex whse ton 95.20 - —
bgs., 1-ton lots, ex whse ton 99.00 - —
Imp., Italian, white low gel., bgs., 5-ton lots ex whse ton 93.40 - —
bgs., 1-ton lots, ex whse ton 97.16 - —
Benzal chloride, chys., works lb .44 - —
Benzaldehyde, NF, dms. lb. .80 - 1.05
Tech., dms., c.l., t.l. lb. .47 - —
dms., l.c.l. lb. .48 - —
Benzene, coaltar, pure or nitration, tanks, works:
Bethlehem, Pa. gal. .31 - —
Birmingham district gal. .31 - —
Chicago district gal. .31 - —
Cleveland district gal. .31 - —
Geneva, Utah gal. .31 - —
Johnstown, Pa. gal. .31 - —
Lackawanna, N. Y. gal. .31 - —
Lone Star, Tex. gal. .31 - —
Lorain, Ohio gal. .31 - —
Middletown, Ohio gal. .31 - —
Mennequa, Colo. gal. .31 - —
Philadelphia district gal. .31 - —
Pittsburgh district gal. .31 - —
Sparrows Point, Md. gal. .31 - —
Syracuse, N. Y. gal. .31 - —
Terre Haute, Ind. gal. .31 - —
Youngstown, Ohio gal. .31 - —
Benzene, petroleum, nitration or industrial, Houston, Tex., tanks, gal. .31 - .40
Benzene hexachloride, 25% and 99% gamma isomer (see Lindane).
Benzene hexachloride, tech., high gamma, bgs., c.l., t.l., consignment, dlvd., gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0065- —
tech., low gamma, bgs., c.l., t.l., consignment, dlvd. gamma-unit. .0075- —
bgs., c.l., t.l., direct sale, f.o.b. works gamma-unit. .0056- —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
bbls., l.c.l., same basis lb. 1.21 - —
Benzidine sulfate, tech., bbls., frt. alld., 100% basis lb. 1.21 - —
Benzidine yellow, AAA, bbls. dlvd lb. 2.20 - —
AAOT, bbls., dlvd. lb. 2.55 - —
Lightfast, bbls., dlvd. lb. 3.40 - —
Benzocaine, dms. lb. 3.48 - 3.50
Benzoic acid, tech., bbls., dms., c.l., t.l., frt., alld lb. .37 - —
bbls., dms., ton lots, same basis lb. .41 - —
bbls., dms., 1,000-lb. lots, same basis lb. .43 - —
USP, bbls., dms., ton lots lb. .48 - —
bbls., dms., 1,000-lb. lots lb. .50 - —

BENZOL
Benzol quotations, both coaltar and petroleum, may be found under Benzene.

Benzoin gum, Sumatra cs. lb. .33 - —
Benzophenone, dms. lb. 1.40 - 1.65
Benzotriazole, tech., dms., 1,000-lb. lots, works lb 2.25 - —
Benzotrichloride, chys., 1,000-lb. lots or more, frt., equald lb. .21 - —
chys., smaller lots, frt., equald lb. .23 - —
Benzoyl chloride, coys., dms., c.l., works, frt., equald lb. .22 - —
cbys., l.c.l., same basis lb. .23 - —
tanktrucks, dlvd. Metropolitan area lb. .21 - —
Benzoyl peroxide, purif., fib dms., 50 to 1,000-lb. lots, works lb. .98 - 1.08
Benzyl acetate, t.t.c., cns., dms lb. .58 - .79
Benzyl alcohol, NF, dms. lb. .58 - .80
Tech., dms., dlvd lb. 47½- .65
Benzyl benzoate, NF, USP, 40-lb. dms lb. .68 - —
Benzyl chloride, tech., cbys., dms., c.l., works, frt., equald lb. .22½- .25½
cbys., dms., l.c.l., same basis lb. 23½- 25½
tanktrucks, dlvd., Metropolitan area lb. .21 - —

A 2½c. differential is quoted on benzyl chloride in 5-gal cbys. In steel dms. prices are ½c. lower.

Benzyl cinnamate, cns. lb. 3.30 - 3.60
Benzyl dimethylamine, dms., works. lb 2.25 - —
Benzyl formate, cns. lb 1.85 2.10
Benzyl isoeugenol, cns lb. 9.25 - —
Benzyl propionate, bots. lb 1.35 1.65
Benzyl salicylate, bots. lb. 1.50 - 1.85
Benzylidine acetone, bots lb 1.75 1.80
Benzylidine chloride (see Benzal chloride).
Berberine, bisulfate, cns lb. 48.50 - —
Berberine hydrochloride, bots lb. 48.50 - —
Bergamot oil, nat., NF Italian, cns lb. 11.75 -13.00
Betagammapicoline (see b,g-Picoline).
Betahydroxynaphthoic acid (see b-Oxynaphthoic acid)
Betaoxynaphthoic acid (see b-Oxynaphthoic acid)
Betamethylnaphthalene (see b-Methylnaphthalene)
Betanaphthol (see b-Naphthol)
Betanaphthylamine (see b-Naphthylamine)
Betaphenylethylamine (see b-Phenylethylamine)
BHC (see Benzene hexachloride, tech.)
Biotin, cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Birchtar oil, crude, cns. lb 1.50 1.90
Rectified, cns. lb 1.75 2.00
Bismuth chloride, bars lb 5.11 —
Bismuth hydroxide, dms. lb 4.60 4.65
Bismuth metal, bxs., ton lots lb 2.25 —
Bismuth nitrate, cryst., dms lb 2.08 2.17
Bismuth oxide, anhyd., 100-lb. dm., f.o.b. works lb 4.42 - —
Bismuth oxychloride, 25-lb dm., f.o.b. works lb. 4.42 - —
Bismuth subcarbonate, USP, dms. lb 3.20 - —
Bismuth subgallate, NF, 200-lb. dm., f.o.b. works lb 3.15 - —
Bismuth subiodide, fib. dms. lb. 5.37 - —
Bismuth subnitrate, NF, 200-lb. dm., f.o.b works lb. 2.65 - —
Bismuth subsalicylate, USP, 100-lb. dm., f.o.b works lb. 3.50 - —
Bismuth-ammonium citrate, USP, powd., jars lb 4.22 - —
Bisphenol-A, bgs., c.l., t.l., single shipt., 70,000-lbs or more, frt alld lb. .29½- —
bgs., c.l., t.l., less than 70,000 lbs., same basis lb. .30 - —
bgs., l.c.l., same basis lb. .31 - —
Blackberry root bark, bls. lb .50 - .55
Black haw root bark, bls. lb .63 - .65
Black haw tree bark, bls lb .45 .50

BLACK PIGMENTS
Black pigment quotations are listed individually. For example, prices on Black, acetylene, may be found in the A's under Acetylene black.

Blanc fixe, direct process, bgs., c.l., works ton 145.00 - —
bgs., l.c.l., works ton 155.00 - —
bgs., l.c.l., New York whse ton 195.00 - —
Blood, dried, 16-16½% ammonia, bgs., New York unit-ton. 4.75 - —
high-grade, unground, 16-17% ammonia, bgs., Chicago unit-ton. 4.75 - —
Bloodroot, bls. lb. .90 - 1.00

BLUE PIGMENTS
Blue pigment quotations are listed individually. For example, prices on Blue, ultramarine, may be found in the U's under Ultramarine blue.

Blue dyes (see Dyes)
Blue vitriol (see Copper sulfate)
Bois de rose oil, Brazilian, dms lb. 1.90 - 2.55
Peruvian, dms. lb 1.80 2.25
BON acid maroons, pure, bbls lb 1.75 - —
Resinated, bbls. lb. 1.50 - —
Bone black, dms., l.c.l. frt. alld lb. .18 - .22¾

Pacific coast bone black prices 2c. per lb. higher.

Bonemeal, steamed, works, E ton. 75.00 - —
Bone phosphate, defluorinated of lime (see Defluorinated phosphate).
Bone phosphate, precip. (see Calcium phosphate, tribasic).
Borax, tech., anhyd., 99½%, bgs., c.l., works ton 92.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 7.42 - —
bgs., smaller lots, same basis 100 lbs. 8.67 -10.67
bulk, c.l., works ton 83.00 - —
gran., decahydrate, 99½%, bgs., c.l., works ton 50.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 5.32 - —
bgs., smaller lots same basis, 100 lbs. 6.57 - 8.57
bulk, c.l., works ton 43.50 - —
gran., pentahydrate, 99½%, bgs., c.l., works ton 64.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.05 - —
gran., pentahydrate, 99½%, bgs., smaller lots, same basis 100 lbs. 7.30 - 9.30
bulk, c.l., works ton 58.00 - —
USP, powd., bgs., c.l., works, ton 54.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 6.45 - —
bgs., smaller lots, same basis, 100 lbs. 7.70 - 9.70
Bordeaux powder, tribasic, bgs., c.l., dlvd lb. .24 - —
bgs., l.c.l., same basis lb. .26 - —
Boric acid, tech, anhyd, 99.9% bgs., c.l., works ton 335.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 19.62 - —
bgs., smaller lots, same basis, 100 lbs. 20.87 - 22.87
Boric acid, tech., anhyd., cryst., 99.9%, bgs., c.l., works, ton. 163.50 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 11.05 - —
bgs., smaller lots, same basis, 100 lbs. 12.30 -14.30
dms., c.l., works ton. 188.50 - —
dms., ton lots, ex whse., New York or Chicago, 100 lbs. 12.30 - —
bgs., smaller lots, same basis 100 lbs. 13.05 - —
gran., 99.9% bgs. c.l., works, ton. 112.00 - —
bgs., ton lots, ex whse, New York or Chicago 100 lbs. 8.47 - —
bgs., smaller lots, same basis, ton. 174.25 - —
dms., c.l., works ton. 137.00 - —
dms., ton lots, ex whse, New York or Chicago 100lbs. 9.72 - —
dms., smaller lots same basis, 100 lbs. 10.47 - —
bulk, c.l., works ton. 106.00 - —
powd., bgs., ton lots, ex whse, New York or Chicago, 100 lbs. 8.85 - —
bgs., smaller lots, same basis, 100 lbs. 10.10 -12.10
dms., smaller lots, same basis 100 lbs. 11.45 - —

USP boric acid $25 per ton higher in bags.

Borneol, cns lb. 2.75 - —
Boron trichloride, CP, 1,800-lb. cyls., works lb 1.25 - —
100-lb cyls. works lb. 1.70 - —
Boron trifluoride, gas, cyls, t.l., works lb. .70 - —
cyls., t.t.l., works .70 - —
Brimstone (see Sulfur).
Broenner's acid, bbls. lb. 1.53 - —
Bromine, purif., cs., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
cs., l.c.l., same basis lb. .34 - .39
ref. dms., c.l., t.l., dlvd. E. of Rockies lb. .31 - —
ref. dms., t.c.l., same basis lb. .31 - .34
tanks, same basis lb. .21½- —
Bromochloromethane, dms., c.l., frt. equald lb. .48 - —
dms., l.c.l., same basis lb. .50 - —
tanks, same basis lb. .47 - —
Bromoform, pharmaceutical grade, 100-lb. cbys lb 1.80 1.90
Bromstyrol, bots. lb. 5.35 - 5.70
Brucine, cns. oz. 1.50 - 1.75
Brucine sulfate, NF, cns. oz. 1.50 - 1.75
Buchu leaves, bls. lb. .80 - .85

BROWN PIGMENTS
Brown pigment quotations are listed individually. For example, prices on Brown, iron oxide, may be found in the I's under Iron oxide brown.

Butadiene, refd. cyls., c.l., refy lb. .21 - —
cyls., l.c.l. refy lb. .22 - —
tanks, dlvd. lb. .14½- —
n-Butyl acetate, ferment, dms., c.l., frt. alld lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
Syn., dms., c.l., dlvd. E lb. .17 - —
dms., l.c.l., same basis lb. .18½- —
tanks, same basis lb. .14½- —
sec-Butyl acetate, syn., dms., c.l., dlvd. E lb. .14¾- —
dms., l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .12¼- —
n-Butyl acrylate, dms., c.l. or t.l., straight or mixed frt. alld. E. lb. .42½- —
dms., t.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 —

Prices of n-butyl acrylate are 1c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

n-Butyl alcohol, ferment, dms., c.l., frt. alld lb. .17½- —
dms., l.c.l., frt. alld lb. .19 - —
tanks, frt. alld lb. .15 - —
n-Butyl alcohol, syn., dms., c.l., dlvd. lb. .17½- —
dms., l.c.l., frt. alld lb. .19 - —
tanks, dlvd. lb. .15 - —
Sec-synthetic, dms., c.l., dlvd. lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
Tert-synthetic, dms., c.l., frt. alld, dlvd. E. lb. .15 - —
dms, l.c.l., same basis lb. .16½- —
tanks, same basis lb. .12½- —
Butyl aldehyde (see Butyraldehyde).
Butyl chloride, dms., c.l., works lb. .37½- —
dms., l.c.l., works lb. .38¼- —
n-Butyl ether, dms., c.l., works lb. .35¼- —
dms., l.c.l., works lb. .36 - —
tanks, works lb. .33¼- —
Butyl lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½- —
dms., t.c.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Butyl laurate, dms., works lb. .37½- —
Butyl methacrylate, dms., c.l., t.l., works lb. .55 - —
dms., l.c.l., works lb. .55½- —
Butyl oleate, refd., dms., l.c.l., works lb. .32 - —
Butyl phenylacetate, dms. lb. 4.50 4.60
Butyl phthalate (see Dibutyl phthalate).
Butyl stearate, dms., c.l., frt. alld, E. of Mississippi lb. .27¼- —
dms., t.c.l., same basis lb. .28¼- —
Butylamine (see Mono-, Di- and Tri-butylamine)
6-tert-Butyl-m-cresol (see Mono-tert-butyl-m-cresol).
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).
p-tert-Butylphenol, bgs., c.l., dlvd. lb. .27½- —
bgs., l.c.l., works lb. .28½- —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
dms., l.c.l., dlvd. lb. .23½- —
tanks, dlvd. lb. .19½- —
Butyric acid, 99%, dms., c.l., frt. equald lb. .34 - —
dms., l.c.l., same basis lb. .34½- —
tanks, same basis lb. .32½- —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium CP red, dark shade, bbls., frt alld, E. of Rockies lb. 5.45 - —
Light shade, bbls, same basis lb. 4.55 - —
Medium shade, bbls., same basis, lb. 5.20 - —
Medium light shade, bbls, same basis lb. 4.80 - —
Orange-red shade, bbls, same basis lb. 4.20 - —
Yellow all shades, bbls, frt alld, E. of Rockies lb. 3.75 - —
Cadmium iodide, 45-lb fib dms lb 6.75 7.00
Cadmium metal, ingots or sticks, ton lots, cs., dlvd lb. 1.30 - —
Cadmium-mercury lithopone orange, deep shade, bbls., frt. alld E. of Rockies lb. 1.61 - —
Cadmium-mercury lithopone red, dark shade, bbls., same basis lb. 1.91 - —
Red, light shade, bbls, same basis lb. 1.68 - —
Red, medium shade, bbls, same basis lb. 1.83 - —
Red, medium light shade, bbls., same basis lb. 1.76 - —
Red, maroon shade, bbls, same basis lb. 1.99 - —
Cadmium-selenide lithopone maroon, bbls., frt. alld E. of Rockies, lb. 2.72 - —
Maroon, dark shade, bbls, same basis lb. 2.74 - —
Orange, bbls., same basis lb. 1.54 - —
Cadmium-selenide lithopone red, orange-red shade, bbls, same basis lb. 1.68 - —
Red, dark shade, bbls, same basis lb. 2.52 - —
Red, light shade, bbls, same basis lb. 1.84 - —
Red, medium-light shade, bbls., same basis lb. 1.96 - —
Red, medium shade, bbls, same basis lb. 2.19 - —
Cadmium-selenide, lithopone yellow, all shades, bbls, frt alld E. of Rockies lb. 1.15 - —
Caffeine, NF, citrated, ams, 100-lb. lots or more lb 2.70 - —
USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb. 1.96 - —
USP, syn., anhyd., dms., 100-lb. lots or more lb 2.10 - —
cryst., hydrous, dms., 100-lb. lots or more lb 1.96 - —
Cajuput oil, native cns lb 1.75 2.55
Redist., USP cns lb 1.90 2.10
Calamine, USP, dms. lb 34 —
Calamus oil, bots lb. 12.00 -20.00
Calciferol, cryst., 10-kilo or more lots, works gram .54 - —
1-10 kilo lots gram .55 - —
Calciferol in edible oil (see Viosterol).
Calcium p-aminosalicylate, trihydrate, fib dms., 100 lbs. or more, frt adjusted lb 3.10 - —
Calcium arsenate, dealers, bgs., c.l., frt alld lb. .09 - 09¼
bgs., l.c.l., same basis lb. .10 - 10½
Calcium bromide, NF, jars, 100 lbs. or more lb. .97 - —
Calcium carbide, standard generator size, 600-lb dms, c.l., dlvd ton. 149.00 - —
Calcium carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton. 10.50 - —
chalk, whiting, 325 mesh, bgs., c.l., works ton. 32.00 -34.00
water-grd., ½ to 10 microns, bgs., c.l., works ton. 30.00 —
10 to 20 microns, bgs., c.l., works ton. 17.00 -18.00
Precip., dense, bgs., c.l., works, ton. 30.00 -35.00
bgs., l.c.l., works ton 45.00 -50.00
medium, bgs., c.l., works ton. 38.00 —
bgs., l.c.l., works ton 48.00 —
Precip., surface treated, bgs., c.l., works ton. 40.00 -42.00
bgs., l.c.l., works ton 55.00 -57.00
ultrafine, bgs., c.l., works ton 117.50 167.50
bgs., l.c.l., works ton 137.50 187.50
Calcium chloride, flake, 77-80%, paper bgs, c.l., works, frt equald ton. 31.00 - —
Conc., flake or pellet, 94-97%, paper bgs, c.l., works, frt. equald ton. 37.80 - —
Liquor, 40%, tanks, frt. equald, ton. 12.50 - —
Powd., 77% min., paper bgs., c.l., works, frt. equald ton. 37.00 - —
Purif., gran., dms lb. .27 - —
Solid, 73-75% dms. c.l., frt equald ton. 29.50 —
dms. t.c.l., works frt equald ton. 36.00 -73.00
USP, gran., dms. lb .32 —
Calcium chromate, bgs., dlvd lb. .37 - —
Calcium cyanide, dms., c.l., dlvd E. of Rockies lb. .20 - —
dms., l.c.l., same basis lb. .24 - .55
Calcium cyclamate, 100-lb dms lb 1.95 - —
Calcium gluconate, USP, AA grade, 150-lb. dm., ton lb. .73½- —
USP, powd., 150-lb. dm, ton lb. .66½- —
Calcium hydride, lump, dms, works, lb. 2.20 3.00
Calcium hypochlorite, high test, 45-lb cs., dlvd. E. of Rockies, cs. 22.95 -25.10
100-lb. dms., same basis dm. 30.80 -34.50
Calcium hypophosphite, dms., 1,000-lb lots lb 1.28 - —
Calcium iodide, jars lb 4.52 - —
Calcium lactate, NF, dms., 10,000-lb. lots or more, works lb. .36 - .40
dms., smaller lots, works lb. .41 - .48
Calcium mandelate, USP, 150-lb. dm., works lb. 3.25 - —
Calcium naphthenate, liq., 4% Ca., dms, frt equald lb .30 - —
Calcium pantothenate, USP, 1-kilo or more, kilo. 35.00 - —
Calcium para-aminosalicylate (see Calcium p-aminosalicylate)
Calcium phenolsulfonate, dms lb. 1.24 - 1.25
Calcium phosphate, dibasic, USP, bgs, c.l. frt equald 100 lbs 8.25 —
Dibasic, feed grade, 18½% P, bgs., c.l., t.l., frt. equald ton. 86.00 - —
bgs., c.l., t.l., f.o.b. Texas City works ton. 80.50 - —
bgs., l.c.l., frt. equald ton. 96.00 - —
21% P., bgs., c.l., t.l., frt equald ton. 97.65 - —
bgs., l.c.l., frt. equald ton. 107.65 - —

Prices of calcium phosphate dibasic in bulk $3 per ton less than bg., c.l. prices

Calcium phosphate, monobasic, bgs., 10,000-lb. lots, frt. equald, 100 lbs. 7.45 - —
bgs., smaller lots same basis, 100 lbs. 7.95 - —
Tribasic, NF, precip., bgs., c.l., works, frt. equald, 100 lbs. 9.25 - —
bgs., l.c.l., frt. equald, 100 lbs. 10.00 - —
Calcium phytate, bgs., 50 lbs. or more, f.o.b. warehouse N. Y. lb. .39 - —
Calcium resinate, precip, dms ton. lots, frt. alld. works lb. .36¼- —
Calcium silicate, hydrated, bgs., c.l., works lb .06 - —
bgs., l.c.l., works lb. .06½- —
Calcium silicate, paint grade (see Wollastonite)
Calcium stearate, ctns, c.l. lb. .39 —
ctns., l.c.l. lb .40 44
Calcium sulfate (see Gypsum)
Calomel, NF X, powd., 100-lb dms. lb 5.42 —
Camphene, 46° m.p., dms, incl. c.l., works lb .15 —
dms, incl., l.c.l. same basis lb .16½ —
tanks, same basis lb. .12½- —
Camphene, chlorinated, 67-69% (see Toxaphene)

Camphor, monobromated, NF, dms., kgs lb. 3.63 - 3.70
Nat., USP, powd., cs., 100-lb. lots, lb. .60 - .65
tablets, 1-oz. cs. lb. .85 - .90
USP, gran., bbls., 2,000-lb. lots, lb. .59 - —
Syn., USP gran., powd., bbls., 1,000-lb. lots lb. .60 - —
bbls. smaller lots lb. .61 - —
tablets, ctns., 1,000-lb. lots, lb. .85 - —
ctns. 500-lb. lots lb. .86 - —
ctns. smaller lots lb. .87 - —
Syn., tech., 1 bbl. or more lb. .48 - —
Camphor oil, sassafrassy, dms. lb. .35 - .55
White, dms. lb. .26 - .50
Cananga oil, native, cns. lb 6.50 - 7.00
Rectified, cns. lb. 7.25 -10.00
Candelilla wax, crude, bgs. lb. .61 - .62
Refd., bgs. lb. .67 - .68
Powdered Candelilla wax 20 to 100 mesh, 8c higher
Cantharides, Chinese, cs. lb 1.25 - —
powd., bxs. lb 1.75 - —
Russian, bgs. lb 2.25 - —
powd., bxs. lb 2.75 - —
Capric acid, dms. lb 35½ - .38
tanks lb. .33 - .34½
Caprylic alcohol, 85% dms., c.l., and t.l., works lb .19 - —
dms., t.t.l. same basis lb. .19½ - —
tanks, frt. equald lb. .16½ - —
Sec 92-99% dms., c.l. lb .22 - —
dms., l.c.l. lb. .23 - —
tanks .19½ - —
Caprylic acid, dms lb. 35½ - .38
tanks lb. .33 - —
Capsicum (see Pepper red).
Capsicum oil (see Capsicum oleoresin).
Capsicum oleoresin, NF, from dom. pepper, dms lb. 4.00 - —
NF, from African pepper, dms. lb. 4.50 - —
Caraway oil, NF, dms lb. 3.00 - 3.25
Caraway seed, Danish, bgs. lb. .16 - —
Dutch, bgs. lb. .13 - —
Polish, bgs. lb. .12 - —
Carbazole, 97%, bbls., ton lots, works lb 1.05 - —
Carbon black, channel, rubber beads, bulk, c.l., works lb. .07¼ - —
bgs., c.l., works lb. .07¾ - —
bgs., l.c.l., works lb. .15½ - —
Carbon black, furnace, fast extruding, bgs., c.l., works lb. .06¾ - —
ctns., l.c.l., whse lb. .13½ - —
high abrasion, bulk, c.l., works, lb. .07¼ - —
bgs., c.l. works lb. .07¾ - —
bgs., l.c.l., dlvd. or whse lb. .14½ - —
high modulus, bgs., c.l., works, lb .06¼ - —
ctns., l.c.l., whse. lb. .13 - —
semi-reinforcing, bgs., c.l., works, lb. .05¾ - —
bgs., ctns., l.c.l., whse. lb. .12½ - —
Carbon black, pigment, high color beads, ctns., c.l., works lb. .72 - —
ctns., l.c.l., dlvd. or whse lb. .79 - —
medium color, uncompressed, bgs., c.l., works lb. .13½ - —
bgs., l.c.l., dlvd. or whse lb. .22 - —
Carbon dioxide, indust., wholesale, bulk, 30,000-2,999,999 lbs., dlvd Metropolitan areas, E. ton 60.00 -115.00
bulk, 3,000,000 lbs. of more, dlvd., Metropolitan areas, E ton 55.00 - —
Solid, bulk, wholesale, works ton 85.00 - —
Carbon disulfide, 55-gal. dms., c.l., works, frt. equald to competitive points lb. .071 - —
55-gal. dms., l.c.l., same basis lb. .086 - .091
5-gal. dms. 30 dms to c.l., same basis lb. .131 - —
5-gal. dms., less than 30 dms., same basis lb. .161 - —
tanks, dlvd. lb. .0545 - —
Carbon tetrachloride, CP, consumers, dms., c.l., frt. alld lb. .12¾ - —
dms., l.c.l., frt. alld lb. .15¼ - —
Tech., consumers, dms., c.l., t.l., frt. alld lb. .11¾ - —
dms., l.c.l., t.t.l., frt. alld lb. .14¼ - —
tanks, frt. alld lb. .10¾ - .11¼
Carboxymethyl cellulose (see CMC).
Carbromal, NF, dms., 100-lb. lots, works lb. 4.00 - 4.25
dms smaller lots, works lb. 4.10 - 4.75
Cardamom oil, NF, bots. lb. 39.00 - 42.00
Cardamom seed, bleached "A" lb. 2.95 - —
Bleached "B" lb. 2.95 - —
Decorticated Alleppey, cs. lb. 2.85 - —
Guatemala, cs. lb. 2.85 - —
Green, Alleppey, bgs. lb. 2.15 - —
Ceylon, bgs. lb. 2.00 - —
Carmine No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb. 16.80 - —
bulk, smaller lots, dlvd. lb. 16.90 - 17.30
Carnauba wax, chalky, bgs., ton lots lb. .73 - .75
North country, No. 2, crude, bgs., ton lots lb. .84 - .85
refd., pure, ton lots lb. .94 - .95
North country, No. 3, Ceara, crude, bgs., ton lots lb. .76 - .77
Ceara, refd., pure, bgs., ton lots lb. .85 - .86
North country, No. 3, Parnahyba, crude bgs. ton lots lb. .78 - .80
Parnahyba, refd., pure, bgs., ton lots lb. .85 - .86
Yellow, No. 1, Ceara, bgs., ton lots lb. 1.14 - 1.18
Parnahyba, bgs., ton lots lb. 1.16 - 1.20
Powdered carnauba wax, 20 to 100 mesh, 8c. higher.
Carotene, tech., 1,350,000 A units per gram, tins 5-10 kilo lots, dlvd. gram. .20½ - —
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units. .12 - —
USP microcrystalline in oil, 400,000 A units per gram, dms., dlvd million units. .144 - —
b-Carotene in vegetable oil, semi-solid suspension, 400,000 A units per gram, ens. kilo. 57.60 - —
Liquid in vegetable oil, 500,000 A units per gram, ens. kilo. 72.00 - —
Pure, cryst., 1,600,000 to 1,670,000 A units per gram., ens. kilo. 240.00 - —
Carvol, bots. lb. 5.00 - 5.40
Cascara sagrada bark, bulk lb. .34 - .36
Casein, dom., edible, acid precip., 30 mesh., bgs., 10,000-lb. lots or more, works lb. .56 - —
edible, acid, precip., 80 mesh, bgs., 10,000-lb lots or more, works lb. .64 - —
Casein, imp., inedible, acid-precip., grd., Argentine, bgs., c.l., ex-dock, Eastern seaports lb. .20½ - .20¾
New Zealand, bgs., c.l., same basis lb. .25 - —
Cashewnut shell, liquid, treated, dms., c.l., Newark, N. J. lb. .22 - —
dms. ton lots, same basis lb. .23 - —
dms., dm lots, same basis lb. .25 - —
Cassella acid, dms., frt. alld., 100% basis lb. 1.44 - 1.75

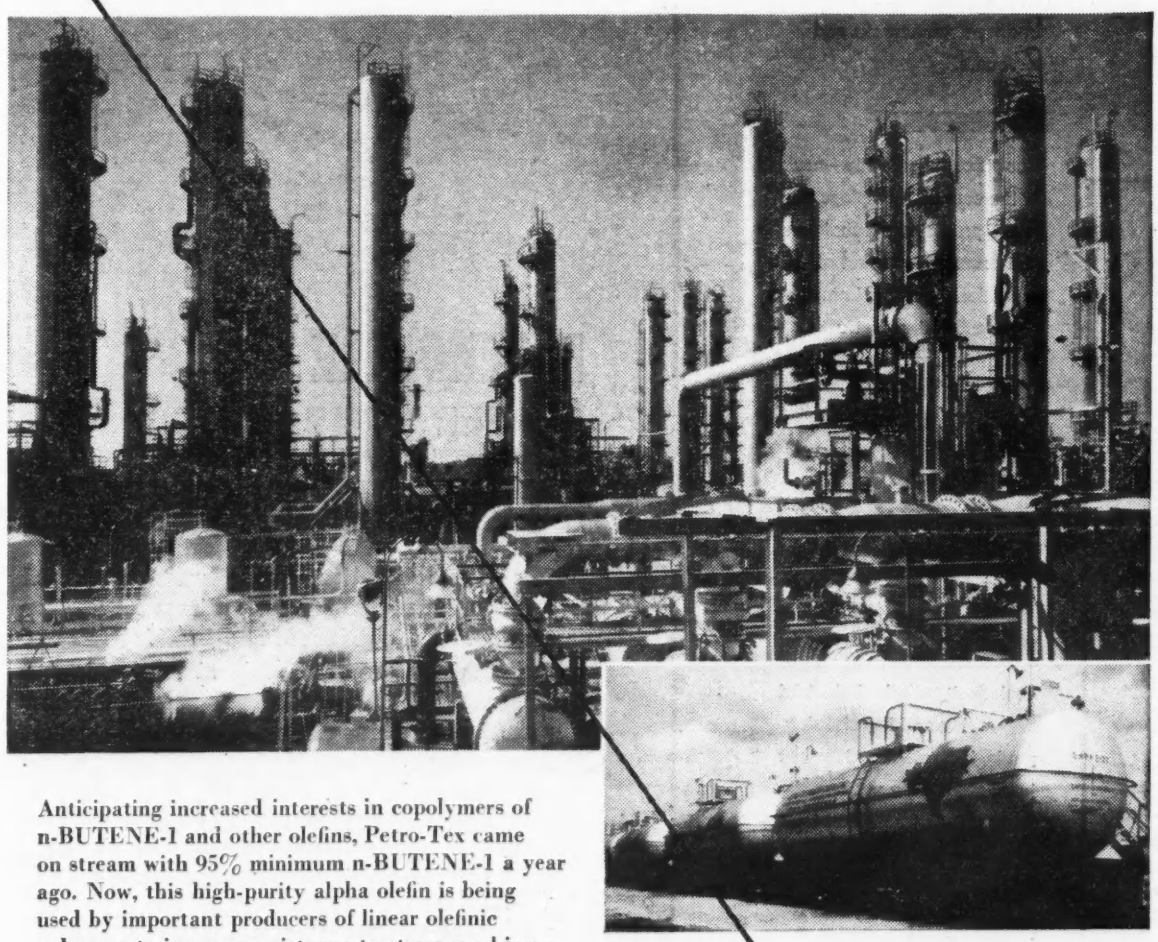
Cassia, Padang, "A," bls. lb. .30 - —
"B," bls. lb. .29 - —
"C," bls. lb. .28 - —
Korintje "A," bls. lb. .29 - —
"B," bls. lb. .28½ - —
"C," bls. lb. .27½ - —
Cassia oil (see Cinnamon leaf oil, USP).
Castor oil, dom., blown, dms. c.l. lb. .2550 - —
dms., l.c.l. lb. .2650 - —
dehydrated, bodied, dms. c.l. lb. .2700 - —
dms., l.c.l. lb. .2850 - —
tanks lb. .2500 - —
dehydrated, unbodied, dms., c.l lb. .2500 - —
dms., l.c.l. lb .2660 - —
tanks lb. .2360 - —
hydrogenated, bgs., c.l. lb. .2450 - —
bgs., ton lots lb. .2850 - —
bgs., l.c.l., dlvd lb. .3050 - —
No. 1, dms., c.l. lb. .2150 - —
dms., l.c.l. lb. .2250 - —
tanks lb. .1950 - —
No. 3, tech., dms., c.l. lb. .2125 - —
dms., l.c.l. lb. .2225 - —
tanks lb. .1925 - —
refd., deod., dms., c.l. lb. .2650 - —
dms., l.c.l. lb. .2750 - —
USP, dms., c.l. lb. .2350 - —
dms., l.c.l. lb .2450 - —
tanks lb. .2150 - —
Imported, No. 1, Braz., tanks lb. .17¾ - .18
Castor oil, sulfonated, 50%, dms., works lb. .15 - .15¼
75%, dms., works lb. .19 - .19½
Castor oil acids, dehydrated, dms. lb 44¼ - .46¼
Split, dms. lb 37¼ - .38¼
Castor pomace, bgs., c.l., works ton 35.00 - —

Castoreum, nat., cns. lb 5.25 - —
Syn., cns. lb 9.00 - —
Catechol, CP, cryst., fib., dms., works lb. 2.17½ - —
Resub., dms., works lb 4.29½ - —
Catnip leaves, Southern, bls. lb. Nom.
Caustic potash (see Potash caustic).
Caustic soda (see Soda, caustic).
Cedarleaf oil USP XIII cns. dms. lb. 2.50 - 3.10
Cedarwood oil, cns., dms. lb. .62 - .70
Celery seed, French, bgs. lb .33 - —
Indian, bgs. lb. .19 - —
Cellulose acetate, flake, powd., bgs. ctns., 100-lb lots or more, dlvd. E lb. .35 - .45
Cellulose acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E lb. .545 .555
27% butyryl content, bgs. dlvd. E lb. .595 .605
38% butyryl content, bgs. dlvd. E lb. .545 .555
38% butyryl content halt-second, bgs., dlvd E lb. .545 .555
50% butyryl content bgs. dlvd., E lb. .585 .595
Cellulose gum, methyl (see Methyl Cellulose)
Cellulose gum, pure high vis. bgs., 23,000 lb lots or more works, frt alld lb .57 - —
bgs., smaller lots, same basis lb. .59 - —

Cerium chloride (see Rare Earth Chloride).
Cerium chloride 46% dms dlvd lb 25 - —
Cerium hydrate 74% CeO fib dms., 100-lb lots or more lb 1 40 - —
77% CeO fib dms 100 lb lots or more lb 1 74 - —
Cerium oxalate (see Rare earth oxalate)
Cerium oxide optical grade, bgs., 50-lb lots or more dlvd lb 1 85 - 1 90
bgs., smaller lots, dlvd lb. 2.15 - —
Cetyl alcohol NF fib cns. c.l., t.l., dlvd. E lb 41½ - —
fib cns. l.c.l., same basis lb 43½ - —
tanks, same basis lb 39 - —
Extra, cns., c.l., t.l., dlvd. E lb. 47½ - —
fib. cns. l.c.l. same basis lb 50½ - —
tanks, same basis lb 46 - —
Chalk (see Calcium carbonate)
Chamomile flowers, Hungarian, bls lb. 1.25 - —
Roman, cs. lb. 1.50 - 1.75
Chamomile oil, blue Hungarian, bots lb 350 00 - —
Charcoal, activated, NF fib dms., c.l. works lb .25 - .32
fib dms. 5-ton lots, works lb. .26½ - .32½
fib dms. smaller lots works lb. .27 - .50
Charcoal, black (see Charcoal, activated)
Charcoal, bone (see Bone black).

second successful year of substantial commercial output

n-BUTENE-1 (95% minimum)



Anticipating increased interests in copolymers of n-BUTENE-1 and other olefins, Petro-Tex came on stream with 95% minimum n-BUTENE-1 a year ago. Now, this high-purity alpha olefin is being used by important producers of linear olefinic polymers to improve resistance to stress cracking and to reduce low-temperature brittleness.

Highly-reactive Petro-Tex n-BUTENE-1 also undergoes a wide range of oxidation, hydration, alkylation and oxo-process reaction with interesting petrochemical possibilities.

We invite inquires for technical data, specifications, price and delivery quotations on n-BUTENE-1, as well as . . .

n-BUTENE-2 (95% minimum) ISOBUTYLENE (99 + % pure)
BUTADIENE DIISOBUTYLENE TRIISOBUTYLENE

Petro-Tex®

PETRO-TEX CHEMICAL CORPORATION
HOUSTON 1, TEXAS
JOINTLY OWNED BY
FOOD MACHINERY AND CHEMICAL CORPORATION
TENNESSEE GAS TRANSMISSION COMPANY
fmc

Charcoal hardwood lump bulk c.l. f.o.b. plant ton 55.00 - —
briquets bulk c.l. f.o.b. plant ton 78.00 - 80.00
5-lb. paper bgs. c.l., same basis ton 106.00 - —
25-lb. paper bgs. c.l., f.o.b. plant ton 87.00 - —
40-lb. paper bgs. c.l., same basis ton 84.00 - —
Chenopodium oil NF cns. lb. 4.15 - 5.00
Chicago acid paste, bbls. frt. alld. lb. 3.21 - —
Chinawood oil (see Tung oil).
Chloral hydrate USP jars, 1,000-lb lots lb. 1.00 - —
jars, 500-lb lots lb. 1.03 - —
jars, 100-lb lots or less lb. 1.05 - —
Chlordan agricultural dms., c.l., frt. alld lb. .65 - —
dms. l.c.l. 5,000 to 10,000-lb lots, frt. alld lb. .66 - —
Clarified, dms., c.l., frt. alld lb. .69 - —
dms. l.c.l. 5,000-10,000-lb lots, frt. alld lb. .70 - —
Chlorinated paraffin, 42%, dms., c.l. frt. alld lb. .16¼ - —
dms. l.c.l. 10 dms or more, same basis lb. .17¼ - —
Chlorinated paraffin, 70%, dms., c.l., same basis lb. .18½ - —
dms l.c.l. 10 dms or more, same basis lb. .19½ - —
Chlorinated rubber, 5, 10, 20 cps., ctns., c.l., works lb. .60 - —
ctns., l.c.l., works lb. .61 - —
125, 1,000 cps., ctns., c.l., works. lb. .69 - —
ctns. l.c.l., works lb. .71 - —
Chlorine, liq., cyls., c.l., works, frt. equald lb. .11 - —
cyls., l.c.l. Metropolitan area lb. .12½ - .13¾
tanks, single units, works, frt. equald 100 lbs. 3.15 - —
tanks, multiple units, 5 cars, works, frt equald 100 lbs. 4.05 - —
tanks, multiple units 4 cars, same basis 100 lbs. 4.25 - —
tanks, multiple units, 2 cars, same basis 100 lbs. 5.25 - 5.75
tanks, multiple units,, 1 car, same basis 100 lbs. 6.25 - 7.25
Chloroacetic acid, mono, flake, 99%, purif., c.l. lb. .23½ - .25½
dms., l.c.l. lb. .24½ - —
tech. flake, 96-97% dms., c.l., frt. equald lb. .19 - —
dms., l.c.l., frt. equald lb. .20 - —
2-Chloro-4-aminotoluene tech., liq., dms., frt. alld lb 1.03 - —
4-Chloro-2-aminotoluene, fused, bbls. lb. 1.38 - —
6-Chloro-2-aminotoluene tech., liq., dms., frt alld lb. .66 - —
m-Chloroaniline, dms., c.l., frt. alld. lb. .75 - —
dms., l.c.l., same basis lb. .77 - —
tanks, same basis lb. .73 - —
o-Chloroaniline, dms., c.l., frt. alld. lb. .52 - —
dms., l.c.l., same basis lb. .54 - —
tanks, same basis lb. .50 - —
p-Chloroaniline, dms., c.l., frt. alld. lb. .77 - —
dms., l.c.l., same basis lb. .79 - —
o-Chlorobenzaldehyde, dms., t.l., works, dlvd. to N.Y. Metropolitan area lb. 1.05 - —
dms., l.t.l., same basis lb. 1.20 - —
p-Chlorobenzaldehyde, dms., l.c.l., works, dlvd. to N. Y. Metropolitan area lb. 1.95 - —
o-Chlorobenzoic acid, fib dms., t.l., works lb. 1.10 - —
fib. dms., smaller lots works lb. 1.25 - —
p-Chlorobenzoic acid, fib. dms., 2,000-lbs. or more, works. lb. 2.25 - —
fib. dms., less than 2,000-lbs., same basis lb. 2.30 - —
Chloroform, tech., dms., c.l., dlvd. E lb. .18 - —
dms., l.c.l., same basis lb. .19 - —
tanks, same basis lb. .17 - —
USP, dms., c.l., dlvd. lb. .27 - —
dms., l.c.l., dlvd. lb. .30 - —
tanks, minimum 4,000 gals. dlvd. lb. .25 - —
2-Chloro-4-nitroaniline, paste, dlvd. E. 100% basis lb. .81 - —
Powd. dlvd. E. 100% basis lb. .86½ - —
4-Chloro-2-nitroaniline, powd. dlvd. E. lb. .80 - —
4-Chloro-2-nitrophenol, tech., paste, dms., frt. alld lb. .75 - —
4-Chloro-2-nitrotoluene tech., solid, dms., frt. alld lb. .99 - —
6-Chloro-2-nitrotoluene, tech., solid, dms., frt. alld lb. .17 - —
o-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
p-Chlorophenol, dms., c.l., frt. equald lb. .37 - —
dms., l.c.l., same basis lb. .38 - —
Chloropicrin, coml., cyls., 160 lbs., frt. alld lb. 1.07 - —
cyls. 100 lbs. same basis lb. 1.08 - —
cyls., 50 lbs., same basis lb. 1.14 - —
Chlorosulfonic acid, dms., c.l., frt. equald lb. .0465- —
dms., l.c.l. frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —
Chlorosulfonic acid, in stainless steel dms. ½c. per lb higher
o-Chlorotoluene, tech., dms., t.l., works lb. .37 - —
dms., l.c.l., l.t.l., same basis lb. .38 - —
Choline bitartrate, fib dms. frt. adjusted kilo. 2.75 - 3.00
Choline chloride fib dms. frt. adjusted kilo. 2.75 - 3.00
Choline dihydrogen citrate, fib. dms., frt adjusted kilo. 2.75 - 3.00
Chrome green, CP dark, tight medium blue content 1-15%, bbls., dlvd. E. of Rockies lb. .42 - —
blue content 16-30%, bbls., same basis lb. .42 - —
blue content 31-45%, bbls., same basis lb. .43 - —
blue content 45-49%, bbls., same basis lb. .46 - —
Reduced color, 25% lb. .19 - —
Chrome green prices 1c. higher W. of Rockies.
Chrome orange CP bbls., dlvd. E. of Rockies lb. .35 - —
Chrome orange prices 1c higher W. of Rockies.
Chrome yellow CP bbls., dlvd E. of Rockies lb. .35 - —
Chrome yellow price 1c. higher W. of Rockies
Chromic acid, 99¾%, dms., c.l., works, frt. equald lb. .29½ - —
dms., l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31
Chromic acid, NF (see Chromium trioxide)
Chromium acetate, soln., 7½%, dms. 500-2,000-lb lots, works. lb. .10 - —
Chromium fluoride, bbls., works lb. .51 - .52
Chromium oxide, hydrated, bbls., fib dms., c.l., frt alld lb. 1.20 - —
Pure, bgs., c.l., frt alld lb. .44½ - —
bgs. l.c.l. same basis lb. .45¼ - —
Chromium trioxide NF bots lb. 1.15 - —
Cinchona bark NF red, broken, bgs lb. .25 - —
NF yellow broken bgs. lb .35 - .40
Cinnamic acid refd bots lb 2.50 - 3.50
Cinnamic alcohol bots. lb. 1.75 - 2.20
Cinnamic aldehyde dms lb 92 - 1.25
Cinnamon, Ceylon, No. 2, bgs. lb. .62 - —
Ceylon No "0000," bgs lb. .78 - —
Cinnamon bark oil bots lb 36.00 - 70.00
Cinnamon leaf oil, crude, dms. lb. 1.60 - 2.00
USP (Cassia), cns., dms lb 8.50 - 13.50
Citral, CP, bots. lb. 3.50 - 4.00
Extra, bots. lb. 3.95 - 5.55
Citric acid USP anhyd., fine gran., bgs., dms., c.l lb. .29½ - .30
bgs. dms. 10,000-lb. lots, 1 shipt lb. .30 - .30¼
bgs., dms., smaller lots lb. .30½ - .31
USP, hydrous, fine gran., bgs., dms., c.l lb. .27½ - .28
bgs., dms., 10,000-lb lots, 1 shipt lb. .28 - .28¼
bgs. dms., smaller lots lb. 29 - .29¼
Powdered citric acid ½c. per lb higher.
Citronella oil, Ceylon, dms. lb. .80 - 1.05
Java-type, dms. lb. .80 - 1.20
Citronellal, bots., dms lb 1.60 - 2.10
Citronellol, bots., dms lb. 2.30 - 3.70
Civet, artif. bots. lb 13.75 - 15.00
Nat., bots. oz. 8.50 - 15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton 17.50 - 21.50
crushed shed moisture, bulk, c.l. Tenn ton 8.00 - 11.00
Clay, ball, imp., airfloated bgs, c.l., Atl. port net-ton 42.00 - 45.75
lump, bulk, Atl port net-ton 29.50 - 35.75
Clay, China, dom., dry-grd. air-floated, 99% 325 mesh, Georgia, bgs. c.l., works ton 10.00 - 12.00
Georgia, bgs. l.c.l. works. ton 15.50 - —
China, dom., airfloated, 99%, 300 mesh bgs., c.l., Georgia, works ton 13.50 - 14.50
bgs. l.c.l., ex-whse ton 35.00 - 36.00
China, imp., white, lump, bulk, c.l., ex dock, Philadelphia, Portland, Me long-ton 20.00 - 35.00
white, powd., bgs., c.l., ex dock. net-ton 50.00 - —
bgs., l.c.l., ex whse net-ton 60.00 - 70.00
Cleaners Naphtha, petroleum, 105°F Flash, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
140°F Flash, tankcars, New Jersey or New York gal. .205 - —
Group 3 gal. .154 - —
Houston, Texas gal. .17 - —
Cleve's acid, tech., mixed, solid, dms., frt. alld lb. 1.05 - —
Cleve's acid, 1,6, tech. solid, dms., frt. alld lb. .77 - —
1,7, tech., dms., frt. alld. lb. 2.20 - —
Cloves, Madagascar, bgs. lb. .40½ - —
Zanzibar, bgs. lb. .42½ - —
Clove bud oil, USP, dms. lb. 2.70 - 3.60
Clove leaf oil, crude, dms. lb. 1.35 - 1.80
CMC, crude, 96.4% low or medium vis. bgs. or fib. dms., 23,000 lbs., dlvd. E., 100% basis lb. .41½ - —
96.4% low. or medium vis., bgs. or fib. dms., 23,000 lbs. dlvd. E., 100% basis lb. .43½ - —
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb. .41½ - —
bgs. or fib. dms., l.c.l., dlvd. E., 100% basis lb. .43½ - —
CMC, purif. high vis. (see Cellulose gum).
CMC, standard, low or medium vis., bgs., 23,000 lbs., works, frt. alld lb. .57 - —
bgs., smaller lots, same basis. lb. .59 - —
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.
Coaltar, crude, resale for soins., tanks, works gal. .17 - —
Refd., resale, indust., dms., c.l., ex whse gal. .35 - —
dms., l.c.l., ex whse. gal. .39 - —
tanks, works gal. .20½ - —
Coaltar pitch, aluminum, bulk, works ton 44.00 - —
Carbon and indust., bulk, works. ton 44.00 - —
Core, bulk, works ton 40.50 - —
Fiber, bulk, works ton 48.00 - —
Roofing, 140-155°F, Federal Specification RP-381 Type 1, tanks, works ton 41.00 - —
Cobalt acetate, 23.7% Co., dms. dlvd lb. 1.04 - —

CARBON TETRACHLORIDE

Technical grade meets all specifications. Available in drums, tank trucks and tank cars.

CHLOROFORM

Our plant at Louisville—newest in the country—employs the latest processing techniques and assures a product of exceptional quality. Immediate shipment in drums, trucks and tank cars. Two grades: U.S.P. and Technical.

METHYLENE CHLORIDE

Available in bulk at highest levels of purity for every technical and industrial use.

PERCHLORETHYLENE

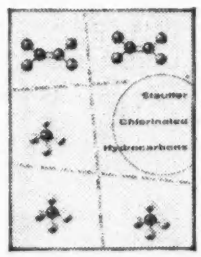
Technical grade for industrial degreasing and Dry-cleaning grade, both stabilized for use in all standard machines. Drums, tank trucks and tank cars from many points throughout the country.

TRICHLORETHYLENE

For industrial degreasing and chemical intermediate use. Available in drums from Louisville and stock points throughout the country; in drums, tank cars and tank trucks from Niagara Falls.

DEPENDABLE SINGLE SOURCE OF 5 CHLORINATED SOLVENTS

The wide distribution of warehouses and central location of manufacturing facilities make Stauffer a dependable, continuous and *flexible* source of Chlorinated Solvents. Plants at Louisville and Niagara Falls... warehouses and distributor points throughout the country are convenient sources for Stauffer Chlorinated Solvents wherever you are located.



Stauffer Chlorinated Solvents meet all standards for purity, exceed many, and are notably high in the case of chloroform. They are shipped in quantities from drums to tank cars. Mixed loads available from Louisville in compartmented cars and trucks. 55-gallon drums in mixed carloads and truckloads from Louisville, Niagara Falls and many distributor points. Send for a brochure on Stauffer's Chlorinated Hydrocarbons.

Stauffer CHEMICALS SINCE 1885

STAUFFER CHEMICAL COMPANY

380 Madison Avenue, New York 17, N.Y.
Prudential Plaza, Chicago 1, Illinois
824 Wilshire Boulevard, Los Angeles 17, California
636 California Street, San Francisco 8, California

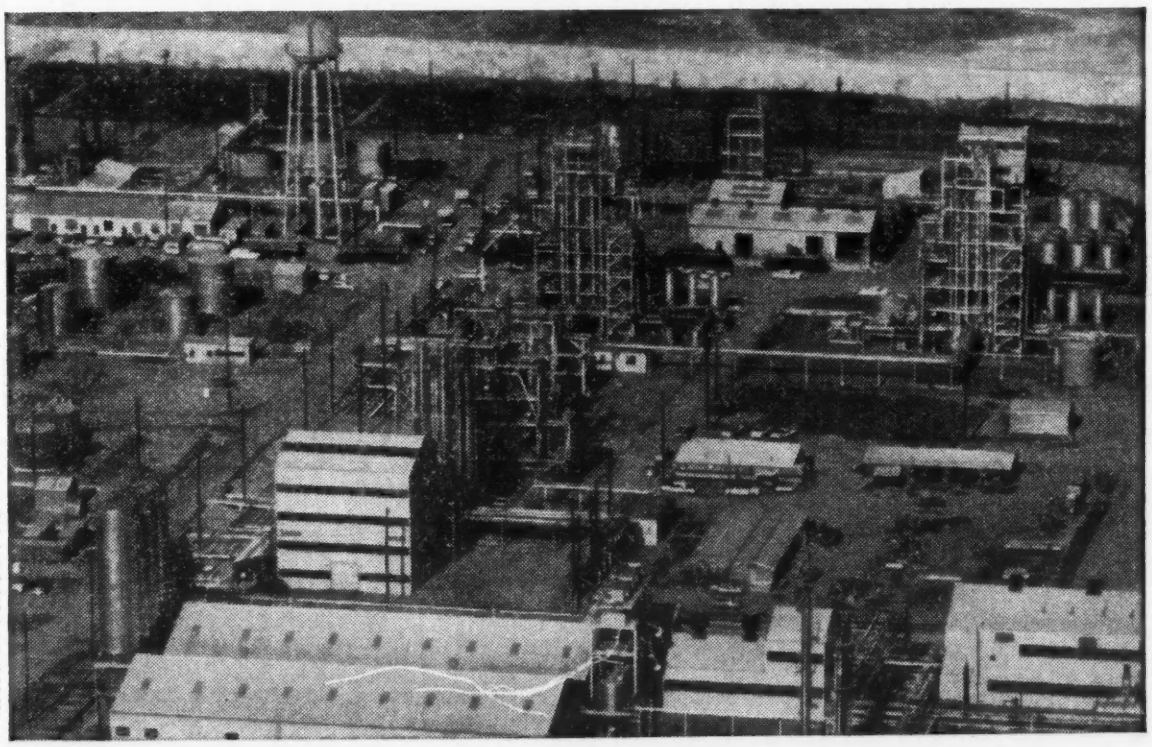
Cobalt blue genuine 250 lb. bbls., dlvd. E. of Rockies lb. 4.90 - —
Cobalt blue prices 1c. higher W. of Rockies.
Cobalt blue, imitation (see Ultramarine blue).
Cobalt carbonate, 48% Co., powd., bgs., dlvd lb. 1.45 - —
Cobalt chloride, 24.2% Co., dms., dlvd lb. .99 - —
Cobalt hydrate, 60-61% Co., dms., dlvd lb. 2.05 - —
Cobalt linoleate, fused 8½% Co., dms lb. .71½- —
Liq., 6% Co. dms. ..... lb. .57½- —
Cobalt metal, 97-99%, dms., f.o.b. carrier lb. 1.75 - —
Cobalt naphthenate, liq. 6% Co., dms. dlvd lb. .48¾- —
Cobalt nitrate, 20.1% Co. bbls., dlvd. lb. .80 - —
Cobalt oxide, black, ceramic grade, 72½-73½% Co., kgs., dlvd. E. of Mississippi R lb. 1.33 - —
70-71% Co. kgs. same basis lb. 1.29 - —
Cobalt oxide prices W. of Mississippi R. 3c. per pound higher.
Cobalt phosphate, powd., 32.1% Co., dms., dlvd lb 1.35 - —
Cobalt resinate, fused, 3% Co., dms. lb. .29½- —
Cobalt sulfate, cryst., 21% Co., dms. dlvd lb. .64 - —
Monohydrated, 33% Co., dms., dlvd lb. 1.09 - —
Cobalt tallate, 6% Co., dms., dlvd. lb. .44 - —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Cocaine hydrochloride, cns., 100-oz. lots oz. 13.75 - —
Cocillana bark, bls. ..... lb. .20 - .22
Cocoa butter, bgs. ..... lb. .62 - .67
Coconut oil, crude, tanks, New York. lb. .18¾- —
tanks, Pac. coast ..... lb. .17⅞- —
Refd., deodorized, dms ..... lb. .25 - .26
Coconut oil acids, dist., dms. .... lb. .30½- .33
tanks ..... lb. .28 - —
Double dist. (stripped), dms. lb. .31½- .34
tanks ..... lb. .29 - —
Cod oil, dms., spot ..... lb. .08¼- .08⅜
Codeine, NF, cns., 100-oz lots oz. 13.25 - —
Codeine hydrochloride, cns., 100-oz. lots oz. 11.75 - —
Codeine phosphate, USP, cns., 100-oz. lots oz. 10.25 - —
Codeine sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil, USP, dms. ..... gal. 1.40 - 1.70
Cohosh root, black, bls. ..... lb. .20 - .22
Blue, bls. ..... lb. .20 - .22
Colchicine, USP, bots. ..... oz. 27.00 - —
Colchicum root, bls ..... lb. .30 - .35
Colchicum seed, bgs ..... lb. .60 - .65
Collodion, USP, dms ..... lb. .32½- —
USP, flexible, dms ..... lb. .34 - —
Colocynth pulp, bls ..... lb. .75 - —
Colombo root, bls ..... lb. .16 - .18
Condurango bark, bls. ..... lb. .26 - —
Congo copal gum, No. 1, bgs ... lb. .25 - .26
No 2 bgs. ..... lb. .22 - .24
No. 3, bgs. ..... lb. .16½- .19
Copaiba balsam, cns., dms ..... lb. .55 - —
Copaiba oil, cns. ..... lb. 1.35 - 2.00
Copper acetate, bbls., c.l., works. lb. .53 - —
bbls., l.c.l., works ..... lb. .54 - —
Copper carbonate, 55%, bgs., c.l., works lb. .3635- —
bgs., l.c.l., works ..... lb. .3785- —
Copper chloride, cupric, anhyd., dms., works lb. .45½- 48
Cryst., dihydrate dms. works, lb. .31 - .31½
Cryst., dried, dms., works ..... lb. 39¼- .39¾
Copper chloride, cuprous, dms., works lb. .4135- .4435
Copper cyanide, tech., dms., 20,000-lb lots or more lb. .609 - —
dms., 1,000-lb. lots or more lb. .619 - —
dms., smaller lots ..... lb. .639 - .65
Copper gluconate, dms. ..... lb. 3.20 - —
Copper hydrate dms., c.l., frt. alld. E. of Miss lb. .51¾- —
dms., l.c.l., same basis ..... lb. .52¼- —
Copper metal, electrolytic, dlvd. Valley basis lb. .33 - .36
Copper naphthenate, liq., 8% Cu, dms., frt. alld lb. .26½- —
Copper nitrate, tech., cryst., dms., works lb. .30¾- .32¼
Copper oleate, solid, 9% Cu, dms., works lb. .45 - —
Copper oxide, black, bbls., 100-5,000-lb. lots, works lb. .49¼- —
Copper oxide, red, 97%, USN Type 1, bbls., 100-5,000-lb. lots. lb. .50½- —
90%, USN Type II, bbls., 100-5,000-lb. lots or more, works. lb. .48½- —
Copper quinolinolate, 18% Cu, dms., ton lots lb. 4.25 - —
10% active quinolinolate, dms lb. 1.14 - 1.15
Copper resinate, precip, dms., frt. alld lb. .36½- —
Copper sulfate, CP, gran., dms., works lb. .1885- —
CP, cryst., 99%, bgs., c.l., works. 100 lbs. 13.00 - —
bgs., l.c.l., works .... 100 lbs. 13.25 - 15.75
Copper sulfate, monohydrated, 35%, dms., c.l., works .. 100 lbs. 24.00 - —
dms., l.c.l., works ..... 100 lbs. 24.75 - —
Copper sulfate, tribasic distributors, bgs., c.l., works .. 100 lbs. 29.60 - —
bgs., l.c.l., works ..... 100 lbs. 31.10 - —
Copper undecylenate dms lb 2.75 - —
Copra, Atl., Gulf ports, c.i.f. .. ton. 240.00 - —
Pac. ports, c.i.f. ..... ton. 235.00 - —
Coriander oil, USP, bots ..... lb. 9.00 - 10.00
Coriander seed, Moroccan, bgs. lb. .08 - —
Rumanian, bgs. ..... lb. .07¼- —
Yugoslavian, bgs. ..... lb. .08½- —
Corn oil, crude, tanks, works. lb. .11¾- —
Foots (soapstock) acid 95%, tanks, New York .. lb. .04¾- —
Refd., salad, dms. ..... lb. .17½- .17¾
tanks ..... lb. .15½- —
Corn oil, acids, dist., dms. ..... lb. .16¾- .19¼
tanks ..... lb. .14¼- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.30 - —
paper bgs., l.c.l ..... 100 lbs. 7.45 - —
Corn syrup, 42° Be., non-ret. dms., c.l .. 100 lbs. 7.31 - —
non-ret. dms., l.c.l. ... 100 lbs. 7.46 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, USP, bots., kilo or more .. gram. 1.15 - 1.20
Costus oil, bots. ..... oz. 6.00 - —
Cottonseed meal, 41%, bgs., Memphis .. ton. 63.50 - —
Cottonseed oil, crude, tanks, South East .. lb. .09 - .09¼
tanks, Valley ..... lb. .08¾- —
tanks, Texas, Lubbock ..... lb. .08¾- —
tanks, Texas, Waco ..... lb. .08⅞- —
Foots, (soapstock), acid 95%, tanks, New York .. lb. .04 - —
Refd., salad, dms. ..... lb. .14 - .14¼
tanks ..... lb. .12 - —
Cottonseed oil acids, dist., dms lb. .16¾- .19¼
tanks ..... lb. .14¼- —

Coumarin, NF, cryst., dms. ..... lb. 3.60 - 3.70
Cramp bark, NF, bls. ..... lb. .90 - 1.00
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots. chys., lb. 3.05 - 3.26
Creosote, coaltar, crude, tanks, works, frt. adjusted gal. .24 - —
Crude, soln. 80%, tanks, works, gal. .226 - —
Refd., dms., c.l., works ..... gal. .50 - —
dms., l.c.l., same basis .. gal. .62 - —
tanks, same basis ..... gal. .38 - —
West Coast creosote prices computed on a basis of 24c. per gallon for straight oil and 20c. per gallon for coaltar.
Creosote oil (see Creosote coaltar).
Creosote, beechwood, chys., dms., f.o.b., works, dlvd. in Metropolitan area lb. 1.72 - 1.77
Hardwood, NF, chys. dms. same basis lb. 1.42 - 1.47
Pinewood, dms., incl., c.l., works lb. .0561- —
dms. incl., l.c.l., works ..... lb. .0634- —
dms. incl., l.c.l., ex whse, New York lb. .0745- —
tanks, works ..... lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., c.l., frt. alld lb. .16½- —
Tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis ..... lb. .145 - —
USP, non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., l.c.l., same basis lb. .19 - —
tanks, same basis ..... lb. .16 - —

m-Cresol, 95-98% dms., c.l., works. lb. .60 - —
dms., l.c.l., works ..... lb. .61 - —
m-p-Cresol, 5-95% 3°C., dms., c.l., frt. equald lb. .18 - —
dms., l.c.l., same basis .... lb. .19 - —
tanks, same basis ..... lb. .16 - —
2.97% 2°C., dms., c.l., frt. equald. lb. .22 - —
dms., l.c.l., same basis .... lb. .23 - —
tanks, same basis ..... lb. .20 - —
o-Cresol, 30.5°C. m.p. and over, ret. dms., c.l., frt. equald lb. .17 - —
ret. dms., l.c.l., same basis lb. .18 - —
tanks, same basis ..... lb. .15 - —
30°-30.49°C. m.p., dms., c.l., frt. equald lb. .16½- —
ret. dms., l.c.l., same basis lb. .17½- —
tanks, same basis ..... lb. .14½- —
29°-29.9°C. m.p., dms., c.l., frt. equald lb. .16 - —
ret. dms., l.c.l., same basis lb. .17 - —
tanks, same basis ..... lb. .14 - —
25°-28°C. m.p., dms., c.l., frt. equald lb. .15 - —
ret. dms., l.c.l., same basis lb. .16 - —
tanks, same basis ..... lb. .13 - —
p-Cresol, 98%, dms., c.l., dlvd lb. .52 - —
dms., l.c.l., dlvd. ..... lb. .53 - —
tanks, dlvd. ..... lb. .49 - —
2,3-Cresotic acid, dms., ton lots, works lb. .70 - —
dms., smaller lots, works .... lb. .72 - —
p-Cresyl methyl ether, cns. .... lb. 1.80 - 2.05

Cresylic acid, coaltar, dom., meta-para content above 25%, resins and tricresyl phosphate grades, dms., c.l., t.l., frt. equald gal. 1.35 - —
dms., l.c.l., same basis gal. 1.40 - —
tanks, same bassi ..... gal. 1.15 - —
Cresylic acid, coaltar, dom., meta-para content 25% or less, dms., c.l., t.l., same basis gal. 1.20 - —
dms., l.c.l., same basis gal. 1.25 - —
tanks, frt. equald ..... gal. 1.00 - —
Cresylic acid, coaltar, imp., meta-para content, 25% or less, f.o.b. works, frt. equald. to competitive points, 50 dms. or more gal. 1.03½- —
less than 50 dms., same basis gal. 1.03 - 1.15
tanks, same basis ..... gal. 1.00 - —
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .25 - —
Crotonic acid, dms., 200 lbs. or more, l.c.l., works lb. .51 - —
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
bgs., l.c.l., works .... 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., t.l., works lb. .21 - —
bgs., l.t.l., works ..... lb. .22 - —
Cubeb berries, NF, bgs. ..... lb 1.00 - —
Powd., cs. ..... lb 1.15 - —
Cubeb oil, cns. ..... lb. 12.00 - 16.00

INDUSTRY'S LARGEST AND MOST MODERN POLYVINYL ALCOHOL PLANT, ON STREAM EARLY IN 1960



VINOL POLYVINYL ALCOHOL

From Airco's 20 million-pound-per-year plant at Calvert City . . . • VINOL in nine grades, each tailored to meet your needs for processing and formulation. • VINOL for coatings . . . binders . . . sizing . . . textiles . . . paper . . . emulsions . . . available through Air Reduction Chemical Company. • VINOL for adhesives . . . available through *Colton Chemical Company*, Division of Air Reduction Company, Inc., 1747 Chester Avenue, Cleveland, Ohio. • For technical information on VINOL, write today.

AIRCO

at the frontiers of progress you'll find . . .

AIR REDUCTION CHEMICAL COMPANY

A division of Air Reduction Company, Incorporated
150 East 42nd Street, New York 17, N.Y.
Represented Internationally by Airco Company International

Cumene—p-Dichlorobenzene

Cumene dms., c.l., works ..... lb 12 · —
dms., l.c.l., works ..... lb .14 · —
tanks works ..... lb .11 · —
Cumin seed Iranian, bgs ..... lb .30 · —
Moroccan, bgs ..... lb .31 · —
Turkish, bgs. ..... lb. .27 · —
Cumin seed oil, bots. cns. ..... lb 15.50 -17.00
Cyanamide, fertilizer, mixing grade, 21% N gran. bgs., Niagara Falls Ont., contract ton 57.00 · —
Fertilizer, pulv., 21% N, bgs., works, unit-ton 2.85 · —
Indust. grade, bgs., c.l., works ton 75.00 · —
ogs., l.c.l., works ton 96.00 · —
Indust. grade, 6-16 mesh, dms., c.l., works ton 120.00 · —
dms., l.c.l., works ton 140.00 · —
Cyclohexane, 99% tech., dms., c.l., dlvd. E of Rockies gal 1.02 · —
dms., l.c.l., same basis gal 1.10 · —
dms., c.l., dlvd. W of Rockies gal .77 · —
dms., l.c.l., same basis gal .85 · —
tanks, works gal .55 · —
98%, tech., dms., c.l., f.o.b. works, lb .62¼ · —
dms., l.c.l., same basis ... lb .66½ · —
tanks, same basis ..... lb .40 · —
Cyclohexanol, tech., dms., c.l., works, frt alld E lb .28¼ · —
dms., l.c.l., works, same basis, lb .29¼ · —
tanks, works, same basis lb .26 · —

Cyclohexanone, tech., dms., c.l., works lb .33½ · —
dms., l.c.l., works ..... lb .34½ · —
tanks, works ..... lb .31 · —
Cyclohexylamine, dms., c.l., works, lb .49 · —
dms., l.c.l., works ..... lb .50 · —
tanks, works ..... lb .47 · —
Cyclopropane, CP, 2-lb. cyls., works, cyl 48.00 · —
6-oz cyls., works ..... cyl 12.00 · —
USP, hospitals, cyls., 40-gal. lots, gal .42 · —
cyls., 100-gal lots ..... gal .41 · —
cyls., 200-gal. lots ..... gal .40 · —
Cypress oil, bots. ..... lb 5.30 · —

D

2,4-D tech. bgs., dms., c.l., works, frt. equald lb .40 · —
bgs., dms., l.c.l., same basis lb .45 · .49
2,4-D butyl ester, dms., c.l., works, lb .43 · —
dms., l.c.l., same basis ..... lb .48 · .52
tanks, same basis ..... lb .42 · —
2,4-D isopropyl ester, dms., c.l., works lb .43 · —
dms., l.c.l., works ..... lb .48 · .52
tanks, works ..... lb .42 · —
Dammar gum, Batavia A E, cs lb No stocks.
East India, Batu, bold, bgs. ... lb .14¼ 16½
nubs and chips, bgs. ..... lb .08½ .09½
black, bold bgs. ..... lb .14½ .16½
nubs and chips, bgs ..... lb .12¼ .13½
unscraped bgs. ..... lb .13 · .14½

Dammar gum, East India, Batu, pale, chips, bgs ..... lb .14½ · .16
nubs and chips, bgs. ..... lb .09 · .10
Siam, cs. ..... lb .30 · .33
Singapore No. 1, bgs ..... lb .36 · .41
No. 2, bgs ..... lb .29 · .32
No. 3, bgs ..... lb No stocks.
dust, bgs ..... lb .17 · .19
Dandelion root, bls. ..... lb .28 · .32
DDD, tech., flake, grd., fib. dms., c.l., works lb .45 · .47
fib. dms., l.c.l., works lb .46 · .48
DDT, flake or lump, bgs., c.l., dlvd lb .23 · —
bgs., smaller lots same basis, lb .25 · —
fib. dms., c.l., same basis .. lb .24 · —
fib. dms., smaller lots, same basis lb .26 · —
Powdered DDT 1c. per pound higher.
1-Decanol, tech., dms., c.l., dlvd E, lb .43½ · —
dms., l.c.l., dlvd. E ..... lb .45½ · —
tanks, dlvd. E ..... lb .41 · —
Decyl alcohol, mixed isomers, dms., c.l., dlvd lb .23½ · —
dms., l.c.l., dlvd ..... lb .25 · —
tanks, dlvd ..... lb .21 · —
Perfume grade, bots. ..... lb 1.60 · 2.00
Decyl alcohol, normal (see 1-Decanol)
Deertongue leaves, bls. ..... lb .55 · .60
Defluorinated phosphate feed grade, 13% P, paper bgs., c.l., t.l., works ..... ton 53.00 · —
18% P, paper bgs., c.l., works, ton 66.25 -71.80
19% P, paper bgs, works, Houston, Tex., c.l., t.l. ton 74.35 · —
Prices of defluorinated phosphate in bulk $3 per ton less than bg. c.l. prices.

Degras, common, bbls. ..... lb .10 · .12
Neutral, bbls. ..... lb .21 · .23
Denatured alcohol, ethyl, CD-12, CD-13, CD-14, CD-17, dms., c.l., dlvd E. of Rockies gal .69½ · —
dms., l.c.l., same basis .... gal .74½ · .80¼
tanks, dlvd., same basis .. gal .53½ · —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, proprietary solvent, dms., c.l., dlvd, E. of Rockies gal .72 · —
dms., l.c.l., same basis .... gal .77 · .83
tanks, same basis ..... gal .56 · —
Tankcar sales require written authorization by Alcohol and Tobacco Tax Division.
Denatured alcohol, ethyl, SD1, dms., dlvd E. of Rockies gal .70½ · —
dms., l.c.l., same basis . gal .75½ · .81¼
tanks, same basis .. gal .54½ · —
SD2B, dms., c.l., dlvd. E. of Rockies gal .69 · —
dms., l.c.l., same basis . gal .74 · .80
tanks, same basis gal .53 · —
SD3A, dms., c.l., dlvd. E. of Rockies gal .68 · —
dms., l.c.l., same basis gal .73 · .79
tanks, same basis gal .52 · —
SD23A, dms., l.c.l., dlvd E of Rockies gal .70½ · —
dms., l.c.l., same basis gal .75½ · .81¼
tanks, same basis gal .54½ · —
SD23H, dms., c.l., dlvd. E. of Rockies gal .71 · —
dms., l.c.l., same basis gal .76 · .82
tanks, same basis gal .55 · —
SD29, dms, c.l., dlvd. E. of Rockies gal .69½ · —
dms., l.c.l., same basis . gal .74½ · .80¼
tanks, same basis gal .53½ · —
SD30, dms., c.l., dlvd. E. of Rockies gal .68 · —
dms., l.c.l., same basis .. gal .73 · .79
tanks, same basis gal .52 · —
SD-35A, dms., c.l., dlvd. E. of Rockies gal .71 · —
dms., l.c.l., same basis . gal .76 · .82
tanks, same basis gal .55 · —
SD-40, dms., c.l., dlvd. E. of Rockies gal .70½ · —
dms., l.c.l., same basis gal 75½ · .81¼
tanks, same basis ..... gal .54½ · —
For anhyd. alcohol on above formulas prices are 7c. per gal. higher
West coast dlvd prices are the same as eastern prices, except in Idaho, Montana, Oregon, and Washington where a 5c differential on tankcars is maintained
d-Desoxyephedrine hydrochloride, dms lb 15.00 -17.00
dl-Desoxyephedrine hydrochloride, dms lb 6.50 · —
Dextrin, corn, gum, paper bgs., c.l., 100 lbs 9.38 · —
paper bgs., l.c.l 100 lbs 9.53 · —
canary, dark, paper bgs., c.l. 100 lbs. 9.22 · —
paper bgs., l.c.l 100 lbs 9.37 · —
indust. grade, 6-16 mesh, dms., canary, light, paper bgs. c.l., 100 lbs. 9.12 · —
paper bgs., l.c.l ... 100 lbs 9.27 · —
white, paper bgs., c.l 100 lbs 8.96 · —
paper bgs., l.c.l ... 100 lbs 9.11 · —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher
Dextrose, anhyd., coml., bgs., c.l., 100 lbs. 8.80 · —
bgs., l.c.l. ..... 100 lbs. 8.95 · —
Anhyd., special, aluminum foil lined fib. dms., 200-lb. dms 100 lbs. 14.70 · —
100-lb. dms. ..... 100 lbs. 15.20 · —
Hydrated, coml., bgs., c.l., ex whse 100 lbs. 7.80 · —
bgs., l.c.l., ex whse .... 100 lbs. 7.95 · —
USP, dms. ..... lb. 19¾ · —
Diacetyl, flavor grade bots .... lb. 4.30 4.55
Di-sec-amyl phenol, dms., c.l., works lb .32 · —
dms., l.c.l., works ..... lb .33 · —
tanks, works ..... lb .29½ · —
Di-tert-amyl phenol, dms., c.l., works lb .32 · —
dms., l.c.l., works ..... lb .33 · —
tanks, works ..... lb .29½ · —
Diacetone alcohol, acetone-free, dms., c.l., dlvd lb .15½ · —
dms., l.c.l., dlvd ..... lb .17 · —
tanks, dlvd ..... lb .13 · —
Diacetone alcohol, tech., dms., c.l., dlvd lb .15 · —
dms., l.c.l., dlvd ..... lb .16½ · —
tanks, dlvd. ..... lb .12½ · —
Diallylamine, dms., c.l., dlvd .. lb .98½ · —
dms., l.c.l., dlvd ..... lb 1.00 · —
tanks, dlvd. ..... lb .96 · —
o-Dianisidine, dry, tech., fib. dms. lb 2.00 · —
Dibenzyl sebacate, dms. c.l. works. lb .93 · —
dms., l.c.l. same basis ..... lb .94 · —
tanks, same basis ..... lb .91 · —
Dibromobenzene, bgs. 500-lb lots. lb .55 · —
2,6-Di-tert-butyl-p-cresol, feed grade, c.l., t.l., dms., dlvd ... lb .65 · —
l.t.l., dms., same basis .... lb .68 · —
Food grade, c.l., t.l., dms., dlvd. lb .65 · —
dms., l.t.l., same basis ..... lb .68 · 1.10
Tech., dms., c.l., t.l., dlvd .... lb .57 · —
dms., l.c.l., same basis ..... lb .60 · —
tanks, same basis ..... lb .54 · —
Dibutyl fumarate, dms., c.l., t.l., dlvd. E lb .31½ · —
dms., l.c.l., l.t.l., dlvd. E ..... lb .33 · —
tanks, dlvd. E ..... lb .29 · —
Dibutyl maleate, dms. c.l., t.l., dlvd. E lb .31½ · —
dms., l.c.l., l.t.l., dlvd. E ..... lb .33 · —
tanks, dlvd. E ..... lb .29 · —
Dibutyl phthalate, dms., c.l., dlvd. E. lb .28½ · —
dms., l.c.l., same basis lb .30 · —
tankcars, tanktrucks, 2,000 gals., same basis lb .26 · —
tanktrucks, 1,000-1,999 gals., same basis lb .26½ · —
Dibutyl sebacate, dms., c.l., works. lb .67½ · —
dms., l.c.l., works ..... lb .68½ · —
tanks, works ..... lb .65½ · —
Dibutyl tartrate, dms., works, frt. alld lb .65½ · —
Dibutylamine, dms., c.l., dlvd lb .55½ · —
dms., l.c.l., same basis ..... lb .57 · —
tanks, same basis ..... lb .53 · —
Dicapryl phthalate, dms., c.l., dlvd. lb .27½ · —
dms., l.c.l., dlvd. ..... lb .29 · —
tanks, dlvd. ..... lb .25 · —
Dicapryl sebacate, dms., c.l., works. lb .63 · —
dms., l.c.l., works ..... lb .63½ · .64
tanks, works ..... lb .61 · —
2,5-Dichloroaniline, dms., works lb .83 · —
3,4-Dichloroaniline, tech., solid, tanks, frt. alld lb .73 · —
o-Dichlorobenzene, dms., c.l., frt. alld. E lb .12¾ · —
dms., l.c.l., same basis ..... lb .13¾ · —
tanks, same basis ..... lb .11 · —
p-Dichlorobenzene, dms., c.l., f.o.b. works, frt. alld. E lb .12 · —
dms., 2,000 lbs. or more same basis, lb .14½ · —

DIALKYL-CHLOROALKYLAMINE HYDROCHLORIDES

FACILE WORKING TOOLS FOR . . .

RCl · HCl

R = $Me_2NCH_2CH_2$— (DMC*)
$Et_2NCH_2CH_2$— (DEC*)
$iPr_2NCH_2CH_2$— (DIC*)
$Me_2NCH_2CH_2CH_2$— (DMPC*)
$Et_2NCH_2CH_2CH_2$— (DEPC*)
$Me_2NCH_2CH(CH_3)CH_2$— (DMMPC*)
$Me_2NCH_2CH(CH_3)$— (DMIC*)

*Michigan Chemical product names for the chloride hydrochloride form of R. All commercially available.

Alkylation of amines:
$NH_3 + RCl \longrightarrow RNH_2$
$RNH_2 + RCl \longrightarrow RRNH$
$R_2NH \xrightarrow[2.\ RCl]{1.\ NaNH_2} RR_2N$
$R_3N + RCl \longrightarrow RR_3N^+Cl^-$

Alkylation of alcohols and acids:
$ROH \xrightarrow[2.\ RCl]{1.\ Na} ROR$
$RCO_2H + RCl \xrightarrow{base} RCO_2R$

Alkylation of active methylene groups:
$CH_2 \xrightarrow[2.\ RCl]{1.\ Na + alcohol} CHR$

Formation of Grignard reagents:
$RCl + Mg \longrightarrow RMgCl$

Reaction with metal salts:
$RCl + NaSH \longrightarrow RSH + NaCl$

Investigate these versatile intermediates. They are creating valuable cellulose derivatives for the textile and paper industries, and are used in pharmaceuticals to increase biological activity in tranquilizers, local anesthetics, and other drugs. Other derivatives may find use as curing agents in plastic systems. Michigan Chemical has been a leading producer of the dialkylchloroalkylamine hydrochlorides for over 12 years. Recent process advances have improved quality significantly and have also brought about considerably lower prices. Write for technical data, specifications, and prices. From sample to carload quantities can be supplied.

Copyright 1958 by Michigan Chemical Corporation

MICHIGAN CHEMICAL CORPORATION

670 North Bankson Street, Saint Louis, Michigan

EASTERN SALES OFFICE: 230 Park Avenue, New York 17, N.Y.

C-59-4

1,4-Dichlorobutane, dms. c.l. or t.l., works	lb.	.33½-	—
dms., l.c.l., or t.l., works	lb.	.34 -	—
tanks, works	lb.	.32 -	—
Dichlorodiphenyltrichloroethane (see DDT).			
2,2-Dichloroethyl ether, dms., c.l., t.l., dlvd. E	lb.	.15½-	—
dms., l.c.l., t.l., same basis	lb.	.17 -	—
tanks, same basis	lb.	.13 -	—
Dichloropentanes, dist., dms., c.l., works	lb.	.05 -	—
dms., l.c.l., works	lb.	.06 -	—
tanks, works	lb.	.03 -	—
Dichlorophenoxyacetic acid (see 2,4-D).			
Dicyclohexylamine dms. c.l., works.	lb.	.54 -	—
dms., l.c.l. works	lb.	.55 -	—
tanks, works	lb.	.52 -	—
Dicyclohexyl phthalate, gran., fib. dms., c.l., works, frt. alld.	lb.	.46½-	—
fib. dms., l.c.l., same basis	lb.	.48 -	—
Didecyl phthalate, dms. c.l., works.	lb.	.28½-	—
dms., l.c.l., same basis	lb.	.30 -	—
tankcars, tanktrucks, 2,000 gals.,	lb.	.26 -	—
tanktrucks, 1,000-1,999 gals, same basis	lb.	.26½-	—
Dieldrin, dms., c.l., dlvd	lb.	1.85 -	—
dms., l.c.l., dlvd	lb.	1.90 -	—
Diethanolamine dms., c.l., dlvd E	lb.	.27 -	—
dms., l.c.l., same basis	lb.	.28½-	—
tanks, same basis	lb.	.24½-	—
Diethanolamine lauryl sulfate, dms., c.l., frt. alld	lb.	.27½-	—
dms., t.l., frt. alld	lb.	.23½-	—
tanks, frt. alld	lb.	.26½-	—
Diethyl barbituric acid (see Barbital)			
dms., t.l., same basis	lb.	.18½-	—
Diethyl carbonate dms. c.l., f.o.b. works	lb.	47½-	—
dms. l.c.l. same basis	lb.	48½-	—
tanks, same basis	lb	45 -	—
Diethyl ethanolamines, dms., c.l., dlvd	lb	69½-	—
dms., l.c.l., dlvd.	lb.	71 -	—
tanks, dlvd.	lb	67 -	—
Diethyl oxalate dms. c.l. f.o.b. works	lb	42½-	—
dms., l.c.l., same basis	lb.	43½-	—
tanks, same basis	lb.	40 -	—
Diethyl phthalate dms. c.l. dlvd.	lb	.27¼-	—
dms., l.c.l., dlvd	lb	.29 -	—
Diethyl phthalate, tanktrucks, 1,000-1,999 gals., same basis	lb.	.26½-	—
tankcars, tanktrucks, 2,000-lb. lots, same basis	lb.	.26 -	—
Diethyl sulfate dms. c.l. works	lb.	.19½-	—
dms., l.c.l., works	lb.	.20¼-	—
tanks, works	lb	17½-	—
Diethyl toluamide, 90-95% meta isomer dms., c.l., t.l., works	lb	2.30 -	—
5-44 dm lots, works	lb	2.35 -	—
1-4 dm lots works	lb	2.40 -	—
N,N-Diethyl-m-toluidine tech., liq., tanks, frt. alld	lb.	.83 -	—
Diethylamine dms., c.l., dlvd. E	lb.	.52 -	—
dms., l.c.l. same basis	lb.	.53½-	—
tanks, same basis	lb.	49½-	—
N,N-Diethylaniline dms., c.l., frt. alld	lb.	.57 -	—
dms., l.c.l., same basis	lb.	.58 -	—
tanks, same basis	lb.	.55 -	—
Diethylbenzene, dms., t.l., frt. alld.	lb.	.16½-	—
Di-2-ethylhexyl adipate (see Dioctyl adipate)			
Di-2-ethylhexyl phthalate (see Dioctyl phthalate).			
Diethylene glycol, dms. c.l. dlvd. E	lb.	.17¾-	—
dms., l.c.l., same basis	lb.	.19¼-	—
tanks, same basis	lb.	.15¼-	—
Diethylene glycol diethyl ether, dms. c.l., works	lb.	.51½-	—
dms., l.c.l., works	lb.	.52¼-	—
Diethylene glycol monobutyl ether, c.l. dms., works	lb.	.30¾-	—
dms., l.c.l., works	lb.	.32¼-	—
tanks, dlvd. E	lb.	.28¼-	—
Diethylene glycol monobutyl ether acetate dms., c.l., works	lb.	.30¾-	—
dms., l.c.l., works	lb.	.31½-	—
tanks, dlvd. E	lb.	.28¾-	—
Diethylene glycol monoethyl ether, dms., c.l., dlvd	lb.	.22½-	—
dms., l.c.l., dlvd	lb.	.24 -	—
tanks, dlvd. E	lb.	.20 -	—
Diethylene glycol monoethyl ether acetate dms., c.l., works	lb.	.27¼-	—
dms., l.c.l., works	lb.	.28 -	—
tanks, works	lb.	.25¼-	—
Diethylene glycol monomethyl ether, dms., c.l., dlvd	lb.	.21 -	—
dms., l.c.l., dlvd	lb.	.22½-	—
tanks, dlvd. E	lb.	.18½-	—
Diethylenetriamine, dms., c.l., dlvd. E	lb.	.44 -	—
dms., l.c.l., dlvd. E	lb.	.45½-	—
tanks, dlvd. E	lb.	.41½-	—
Diethylstilbestrol USP bots., 10-kilo lots	kilo.	100.00	-147.50
bots. 1-kilo lot	kilo.	110.00	-152.50
Digitalis leaves, USP, dom., dms.	lb.	1.25 -	—
Digitoxin USP bots	gram	4.75 -	—
Diglycol laurate dms	lb.	.32¾-	.34
Diglycol stearate dms. ton lots	lb.	.26 -	.28
Diglycolic acid bgs. c.l. t.l., works.	lb.	.15½-	—
bgs. l.c.l., works	lb.	.16 -	—
Dihexyl sebacate dms., c.l., works.	lb.	.66 -	—
dms., l.c.l., works	lb.	.67 -	—
tanks, works	lb.	.64 -	—
Dihydrazine sulfate dms. works	lb.	1.10 -	1.25
Dihydrostreptomycin hydrochloride, bulk	gram	.04 -	.041
Dihydrostreptomycin sulfate, bulk,	gram	.04 -	.041
1,2-Dihydroxy anthraquinone, dms., works	lb.	3.45 -	—
2,2-Dihydroxy-5-5-dichloro-diphenyl-methane, pure, dms	lb.	2.55 -	—
tech., dms., 20,000 lbs. or more	lb.	1.11 -	—
dms., 1,050 lbs. to 20,000 lbs.	lb.	1.13 -	—
dms., 150 lbs. to 1,050 lbs	lb.	1.15 -	—
Di-isobutyl ketone, dms. c.l., dlvd.	lb.	.17 -	—
dms. l.c.l., dlvd	lb.	.18½-	—
tanks, dlvd.	lb.	.14½-	—
Di-isobutyl phthalate, dms., c.l., dlvd. E	lb.	.31½-	—
dms., l.c.l., same basis	lb.	.32½-	—
tanks same basis	lb.	.29 -	—
Di-isobutylene dms. c.l. dlvd. E	lb.	.10 -	—
dms., l.c.l., dlvd. E	lb.	.11½-	—
tanks, dlvd. E	lb.	.08 -	—
Di-iso-octyl phthalate, dms., c.l., dlvd	lb.	.27½-	—
dms., l.c.l. same basis	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals., dlvd.	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., dlvd	lb.	.25 -	—
Di-iso-octyl sebacate, dms., c.l., works	lb.	.62 -	—
dms., l.c.l., works	lb.	.62½-	.63
tanks, works	lb.	.60 -	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¾-	—
dms., l.c.l., same basis	lb.	.24¾-	—
tanks, same basis	lb.	.20¾-	—
Di-isopropylamine dms., c.l., dlvd. E of Rockies	lb.	.50¼-	—
dms., l.c.l., same basis	lb.	.52 -	—
tanks, same basis	lb.	.48 -	—
Dillweed oil, dom., bots., dms.	lb.	3.00 -	4.00
Dimethyl anthranilate, cns	lb.	4.15 -	—
Dimethyl ethanolamines, anhyd., dms., c.l., dlvd.	lb.	1.225 -	—
dms., l.c.l., dlvd.	lb.	1.235 -	—
tanks, dlvd.	lb.	1.20 -	—
70% dms. c.l., dlvd., 100% basis, contained amines	lb.	.68½-	—
dms., l.c.l., dlvd., 100% basis	lb.	.69½-	—
tanks, dlvd., 100% basis	lb.	.66 -	—
Dimethyl hydroquinone, dms.	lb.	1.90 -	2.20
Dimethyl phthalate, dms., c.l., works	lb.	.27½-	—
dms., l.c.l., works	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.25	—
Dimethyl sebacate, dms., c.l., works.	lb.	1.31 -	—
dms., l.c.l., works	lb.	1.30 -	—
tanks, works	lb.	1.28 -	—
Dimethyl sulfate, ret. dms., c.l., works	lb.	.17½-	—
ret. dms., l.c.l., works	lb.	.18½-	—
tanks, works	lb.	.16½-	—
Dimethyl sulfide, dms., c.l., works.	lb.	.16½-	—
dms., l.c.l., works	lb.	.17 -	—
tanks, works	lb.	.15 -	—
Dimethylamine, 25% soln., dms., c.l., frt. equald, 100% basis	lb.	.38 -	—
dms., l.c.l., frt. equald, 100% basis	lb.	.38½-	—
tanks, frt. equald, 100% basis	lb.	.28 -	—
40% soln., dms., c.l., frt. equald, 100% basis	lb.	.35 -	—
dms., l.c.l., frt. equald, 100% basis	lb.	.35½-	—
tanks, frt. equald, 100% basis.	lb.	.28 -	—
N,N-Dimethylaniline, dms. c.l., frt. alld	lb.	.28 -	—
dms., l.c.l., same basis	lb.	.29 -	—
tanks, same basis	lb.	.26 -	—
N-N-Dimethylformamide, dms., c.l., t.l., works	lb.	.32½-	—
dms., l.c.l., works	lb.	.33 -	.34
tanks, works	lb.	.30 -	—
2,4-Dinitroaniline, dms. frt alld	lb.	.75 -	—
Dinitroaniline orange toner, CP, bbls. dlvd E of Rockies	lb.	1.56 -	—
Dinitroaniline orange toner prices 1c. higher W of Rockies.			
m-Dinitrobenzene, 89°C., dms.	lb.	.26 -	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C. dms., c.l., frt. alld. E	lb.	.17¼-	—
dms., l.c.l., frt. alld. E	lb.	.17¾-	—
tanks, frt. alld. E	lb.	.17 -	—
2,4-Dinitrophenol, bbls	lb.	.41 -	—
2,4-Dinitrotoluene, oily dms.	lb.	.11 -	—
Refd., 63°C. dms.	lb.	.23 -	—
Dioctyl adipate dms., c.l., works.	lb.	.42½-	—
dms., l.c.l. works	lb.	.43½-	—
tanks, works	lb.	.40 -	—
Dioctyl phthalate, dms., c.l., frt. alld	lb.	.27½-	—
dms. l.c.l. frt alld	lb.	.29 -	—
tanktrucks, 1,000-1,999 gals., same basis	lb.	.25½-	—
tankcars, tanktrucks, 2,000 gals., same basis	lb.	.25	—
Dioctyl sebacate dms. c.l., works.	lb	61¼-	—
dms., l.c.l., works	lb	62¼-	—
tanks works dlvd.	lb	59¼-	—
1,4-Dioxane, dms. c.l. works	lb	.30	—
dms., l.c.l. works	lb	.30¾-	—
tanks works	lb	.28 -	—
Dipentaerythritol, bgs., c.l., t.l., dlvd. E	lb.	.40 -	—
bgs., l.c.l., t.l., dlvd E	lb.	.41 -	—
Dipentene, dest.-dist., dms., c.l., works	gal.	.59 -	—
dms. l.c.l. works	gal.	.63 -	—
dms., l.c.l., ex whse.	gal.	.79 -	—
tankcars, works	gal.	.42 -	—
Steam dist., dms., c.l., works, South	gal.	.72 -	—
dms., l.c.l. dlvd. New York	gal.	.91 -	—
tanks, works, South	gal.	.55 -	—
Dip oil (see Tar acid oil)			
Diphenolic acid, bgs., works	lb.	1.50 -	—
Diphenolic polyether acids, bgs., works	lb.	1.50 -	—
Diphenyl, bgs., c.l., t.l., works	lb.	.17¼-	—
bgs., l.c.l., works	lb.	.19 -	—
tanks, works	lb.	.16 -	—
Diphenyl oxide, perfume grade, cns.	lb.	.55 -	.70
Diphenyl phthalate, dms., c.l., works.	lb.	.51¾-	—
dms., l.c.l., works	lb.	.53¾-	—

MONTROSE

CHEMICAL COMPANY

100 LISTER AVENUE
NEWARK, NEW JERSEY

Dimethyl Isophthalate

Trimethyl Borate — Trimethoxy Boroxine

T.C.P. — Tricresyl Phosphate

Mono Cresyl Diphenyl Phosphate

D.D.T. — Dichloro Diphenyl Trichloroethane

Ethyl Silicate 28% — 40%

D.D.V.P. — Dimethyl Dichloro Vinyl Phosphate
(Minimum 95% Purity)

EXCLUSIVE SALES AGENTS

R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK 20, N. Y.
1721 TRIBUNE TOWER, CHICAGO, ILLINOIS

Diphenylamine—Ethyl Bromide

Diphenylamine, refd., flake, bgs., c.l., works, frt. equald lb. .31 - —
bgs., l.c.l., same basis lb. .33 - —
Refd., fused, tanks, same basis lb. .28 - —
same basis lb. .28 - —
Refd diphenylamine in dms ½c. per lb higher
Diphenylguanidine bgs., dms., ton, lots, frt. alld lb. 49 - —
bgs. smaller lots, frt alld. lb. 50 - —
Diphenylhydantoin-sodium USP dms. lb 5.00 5.60
Dipropylene glycol, dms. c.l., frt. alld lb. .17 - —
dms., l.c.l., frt. alld lb. .18½- —
tanks, frt. alld lb. .14¼- —
Dipropylene glycol metnyl ether, dms., c.l., dlvd E lb. 20 - —
dms., l.c.l., same basis lb. .21½- —
tanks, same basis lb. 18½- —
Dithiodibenzoic acid dms., 1,000-lb lots, works lb 1.45 - —
Di-o-tolylguanidine, dms., ton lots, frt alld lb .69 - —
dms., smaller lots, frt alld. lb. 70 - —
Di-o-tolylthiourea, tech., solid, dms., c.l., t.l., frt. alld lb. .55 - —
Divinylbenzene, 20-25%, dms., c.l., works, frt equald lb. .20 - —
dms., t.c.l., same basis lb. .21 - —
tanks, same basis lb. .19 - —
50-60%, dms., c.l., works, 100% basis lb. 1.00 - —
dms., t.c.l., works, 100% basis lb 1.05 - —

Dodecylbenzene, dms., c.l., f.o.b., works, frt. equald lb. .134 - —
dms., t.c.l., same basis lb. .144 - —
tanks, same basis lb. .114 - —
Dodecylphenol c.l., frt. alld. lb. .22 - —
dms., t.c.l., same basis lb. .23 - —
tanks, same basis lb. .19½- —
Dodecylphenol prices on shipments to Western States are 2c. per pound higher.
Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb and 1-lb. lots, dlvd:
Blue, FD&C, No. 1 lb 15.65 -17.60
No. 2 lb 15.65 -17.60
Green, FD&C, No 1 lb 15.65 -17.60
No. 2 lb 19.60 -22.85
No. 3 lb 31.30 -35.90
Red, FD&C, No. 1 lb. 5.90 - 7.85
No. 2 lb 3.30 4.10
No. 3 lb 19.60 -22.85
No. 4 lb 5.55 7.50
Violet, FD&C, No. 1 lb. 15.65 -17.60
Yellow, FD&C, No. 1 lb. 9.15 -11.05
No. 5 lb 3.30 4.10
No. 6 lb 3.30 4.10
Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Black, D&C, No. 1 lb 10.50 -10.95
Brown, D&C, No. 1 lb 15.65 -16.10
Green, D&C, No. 5 lb 15.65 -16.10
No. 6 lb 15.65 -16.10
No. 7 lb 14.35 -14.80
Orange, D&C, No. 3 lb 10.50 -10.95
No. 4 lb 19.60 -20.05
No. 5 lb. 3.80 4.25

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—
Red, D&C, No. 17 lb 10.50 -10.95
No. 18 lb 23.60 -24.00
No. 19 lb 15.00 -15.45
No. 21 lb 3.90 4.35
No. 22 lb 10.50 -10.95
No. 28 lb 24.15 -24.65
No. 33 lb 17.00 -17.45
Violet, D&C, No. 2 lb 15.65 -16.10
Yellow, D&C, No. 7 lb 10.50 -10.95
No. 8 lb 10.50 -10.95
No. 10 lb 13.05 -13.50
No. 11 lb 13.05 -13.50
Dyes, coaltar, certified colors for drugs and cosmetics, external use, 500-lb. and 1-lb. lots dlvd:—
Blue, Ext., D&C, No. 1 lb 15.65 -16.10
Green, Ext., D&C, No. 1 lb 15.65 -16.10
Red., Ext., D&C, No. 1 lb 13.05 -13.50
Yellow, Ext., D&C, No. 1 lb 10.50 -10.95
Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No.
11110 Brilliant scarlet BN lb. 1.70 - —
13390 Fast blue SR lb 1.30 - —
14025 Yellow 2G lb 1.18 - —
14030 Orange R, extra, conc. lb. 1.52 - —
14645 Chrome black T lb. .73 - —
14720 Rubine XX, conc. lb. 1.47 - —
15510 Orange Y, extra conc. lb. .79 - —
15575 Orange RR lb .94 - —
15620 Fast Red A, conc. lb. 1.53 - —
15705 Chrome blue black R, conc. lb. 1.07 - —
16150 Scarlet 2RL lb. 1.16 - —
16230 Fast light, orange 2G lb. 1.39 - —
16255 Brilliant scarlet 3RN, conc. lb. 1.20 - —
17590 Brown PG lb. 3.00 - —

Dyes, coaltar for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract dlvd. No.
18050 Phloxine 2G lb. 1.05 - —
18055 Fuchsine 6B lb. 1.55 - —
18965 Fast Yellow 2G lb. 2.32 - —
19140 Yellow XX lb. 2.30 - —
19555 Yellow NN, conc. lb. 3.67 - —
20170 Brown Y lb 1.27 - —
20470 Blue black, extra, conc lb 1.37 - —
21010 Brown, RX, conc. lb 1.35 - —
22240 Scarlet B lb. 2.60 - —
22310 Red FC lb. 1.45 - —
22311 Brown MCW lb. 1.40 - —
22590 Diazo black BHD lb. .93 - —
22610 Blue 2B, extra conc. lb. 1.53 - —
23500 Red, 4BX, conc lb. 1.80 - —
24410 Sky blue FF, extra, conc. lb. 1.95 - —
24895 Brilliant yellow conc. lb. 3.11 - —
26400 Navy blue 3R, conc. lb. 1.70 - —
26695 Black F, conc. lb. 2.19 - —
26900 Milling Red 3R, conc. lb. 1.91 - —
27075 Neutral black 2B conc lb. 2.75 - —
27720 Gray L lb 2.08 - —
29185 Fast scarlet 4BNC lb. 2.12 - —
30015 Diazo black VJ conc. lb. 2.48 - —
30235 Black EB, 200% lb. 1.33 - —
30345 Yellow brown K extra lb. 1.26 - —
30295 Green BY, conc. lb. 1.02 - —
35660 Brown B lb. 2.89 - —
37565 Naphthol SWF lb. 1.76 - —
40000 Yellow 2G lb. 1.31 - —
41000 Yellow OX lb. 2.45 - —
42000 Green V, crystals lb. 2.73 - —
42040 Brilliant green G crystals lb. 3.62 - —
42090 Blue EG lb. 1.85 - —
42100 Milling green 6B conc. lb 4.78 - —
42640 Violet 4BXN lb. 2.25 - —
43820 Brilliant blue BBG lb 2.44 - —
44045 Blue B, extra conc. lb. 3.61 - —
45170 Red BX lb. 4.76 - —
50415 Nigrosine SSJ lb. 1.03 - —
52015 Blue GXX lb. 2.22 - —
53185 Black GXCF conc. lb. .38 - —
58005 Alizarin red SC lb. 3.31 - —
59700 Golden orange GFD single paste lb. 2.70 - —
59710 Flaming orange 6RD double powder lb. 4.90 - —
59800 Dark blue BO, single paste lb. 2.28 - —
59825 Jade green NC supra, double paste lb. 1.50 - —
61570 Alizarin green CG, extra lb 3.53 - —
63010 Alizarin blue SAPG lb 3.78 - —
63615 Alizarin blue black B lb 3.02 - —
69825 Blue BLFD double paste lb 2.82 - —
70800 Brown BR single paste lb. 2.03 - —
Dyes, coaltar, oil-soluble, 100-lb drums dlvd. No.
12140 Oil scarlet BL lb. 1.70 - —
12055 Oil orange 7078-V lb. 5.87 - —
26120 Oil red N-1700 lb. 1.76 - —
42535B Methyl violet base lb. 1.88 - —
44045B Victoria blue base lb. 4.06 - —
50415B Oil black 8603 lb. .80 - —
61565 Alizarin cyanine green base. lb 6.13 - —
Spirit black RB lb. 3.89 - —
Spirit brown GN lb 5.30 - —
Spirit orange R conc. lb 5.87 - —
Spirit red B conc lb 6.41 - —
Spirit yellow 2R conc. lb 4.62 - —
12055 Spirit orange 7078-V lb 1.25 - —
Spirit blue THN lb 5.06 - —

E

Echinacea root, bls lb. 1.10 - —
Elm bark, grinding, bls. lb .30 - .32
Powd., bbls., bxs lb. .50 - .55
Select, bundles lb .75 - —
Emetine hydrochloride, USP bots oz. 48 40 - —
Endrin, tech., dms., t.l., dlvd lb 3.35 - —
Eosin red toner, bbls., works lb. 1.85 - —
Ephedrine, syn., USP, anhyd., bots, 100-oz. lots oz. .98 - 1.00
hydrous bots 100-oz lots oz. .92 - —
Ephedrine hydrochloride, NF, dms., oz. .60 - .65
Ephedrine sulfate, USP cryst., dms., oz. .60 - .80
USP, powd., dms. oz. .60 - .80
Epichlorohydrin, dms., c.l., dlvd lb. .29½- —
dms., l.c.l, dlvd lb. .31 - —
tanks, dlvd. lb. .27 - —
Epsom salt (see Magnesium sulfate).
l-Epinephrine base, syn., USP, bots., 100 gram lots gram .58 - —
Erigeron oil, cns. lb. 11.00 - —
Ergot, NF, dms., tin-lined lb. 1.50 - —
Eserine salicylate, bots oz. 54.75 - —
Eserine sulfate, bots oz. 86.00 - —
Ester gum, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W. Va lb. .18 - —
Wood-rosin type, dms., c.l., same basis lb. .18 - —
Ether (see specific product)
Ethyl acetate nat., ferment 85-88%, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
95-98%, dms., c.l., dlvd lb. .15¼- —
dms., t.c.l., dlvd lb. .16¾- —
tanks, dlvd. lb. .12¾- —
99% dms., c.l., dlvd. lb. .15½- —
dms., t.c.l., dlvd lb. .17 - —
tanks, dlvd lb. .13 - —
Syn., 85-88%, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd lb. .12½- —
95-98% dms., c.l., dlvd lb. .15¼- —
dms., t.c.l., dlvd lb. .16¾- —
tanks, dlvd lb. .12¾- —
99%, dms., c.l., dlvd. lb. .15½- —
dms., t.c.l., dlvd. lb. .17 - —
tanks, dlvd. lb. .13 - —
Ethyl acetoacetate, dms., c.l., dlvd. lb. .58½- —
dms., t.c.l., dlvd. lb. .60 - —
tanks, dlvd. lo. .56 - —
Ethyl acrylate, dms., c.l., t.l., dlvd. lb. .36 - —
dms., t.t.l., dlvd. lb. .37 - —
tanks, dlvd. lb. .34 - —
Ethyl alcohol, 190 pf., USP, tax paid dms., c.l., dlvd. E. of Rockies gal. 20.63 - —
dms., t.c.l., same basis gal. 20.68 - 20.74
Ethyl alcohol, 190 pf., USP, tax-free, dms., c.l., dlvd. E. of Rockies gal. .68 - —
dms., t.c.l., same basis gal. .73 - .79
tanks, same basis gal. .52 - —
Ethyl alcohol, absolute 200 pf., tax paid, dms. dlvd. E. of Rockies gal. 21.75 - —
dms., t.c.l., same basis gal. 21.80 - 21.86
tanks, same basis gal. 21.59 - —
Ethyl alcohol, denatured (see Denatured alcohol, ethyl).
Ethyl aminobenzoate, USP (see Benzocaine).
Ethyl amyl ketone, dms., c.l., dlvd. lb. .20 - —
dms., t.c.l. same basis lb. .21½- —
tanks, same basis lb. .17½- —
Ethyl benzoate, bots. lb. .75 - 1.00
Ethyl bromide tech., 98%, dms., c.l., frt. alld E lb. .43 - —
dms., t.c.l., frt. alld. E lb. .45 - —
tanks, frt. alld. E. lb. .41 - —

AMOCO PANAREZ RESINS

Here are five petroleum resins used in the manufacture of protective coatings, asphalt floor tile, rubber goods, shoe sole stock, adhesives, sealants.

PANAREZ RESINS TYPICAL INSPECTION DATA

PANAREZ Number	3-210	6-210	7-210	9-210	12-210
Type	Reactive	Reactive	Reactive	Reactive	Non-Reactive
Color					
Gardner—1933	10	12	—	14	17
Coal Tar	—	—	7	—	—
Softening Point, °F.	210	215	210	210	210
Iodine Number, Wijs Method	227	147	160	170	85
Specific Gravity, 60/60°F.	1.05	1.11	1.09	1.10	1.05
Density, Lbs./Gal. @ 60°F.	8.75	9.22	9.09	9.16	8.78

PANAREZ Resins are available as solids in strippable steel drums of approximately 435 lbs. net. Also available in flake form in 50 lb. bags.

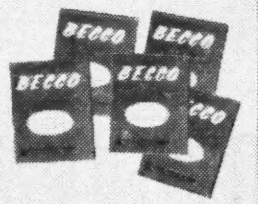
AMOCO CHEMICALS CORPORATION • 910 S. Michigan Ave., Chicago 80, Ill.

Ethyl butyl ketone, dms., c.l., t.l., works lb. .38 - —
dms., l.c.l., l.t.l., works lb. .36¾- —
tanks, works lb. .34 - —
Ethyl butyrate, dms., works lb. .85 - 1.00
Ethyl carbamate (see Urethane).
Ethyl cellulose, vis. 7 cps., bgs., 5,000-lb. lots or more, frt. alld. E lb. .73 - —
bgs., smaller lots, frt. alld. E lb. .75 - —
Ethyl cellulose, vis. 10, 20, 50, 100, 150 cps., bgs., 5,000-lb. lots or more, frt. alld. E. lb. .68 - —
bgs., smaller lots, frt. alld E. lb. .70 - —
Ethyl chloride, tech., cyls., works, lb. .20 - .22
dms., works lb. .18 - .20
tanks, works lb. .10 - —
Ethyl cinnamate, cns. lb. 3.35 - 3.50
Ethyl ethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
dms., l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E. lb. .41½- —
Ethyl ether, absolute, ACS, dms lb. .27 - —
Anesthesia, USP, dealers, 1-lb. cns. lb. 1.01 - —
½-lb. cns. lb. 1.09 - —
¼-lb. cns. lb. 1.21 - —
Indust., dms., c.l., dlvd. lb. .13½- —
dms., l.c.l., dlvd. E lb. .15 - —
tanks, dlvd. E. lb. .11 - —
2-Ethyl hexoic acid, dms., c.l., t.l., dlvd. E lb. .37 - —
dms., l.c.l., l.t.l., dlvd. E. lb. .33½- —
tanks, dlvd. E lb. .34½- —
2-Ethyl hexoic acid, lc. higher W. of Rockies.
2-Ethylhexyl acrylate, c.l. or t.l., straight or mixed frt. alld. E lb. .42½- —
dms., l.t.l., same basis lb. .43½- —
tanks, same basis lb. .40 - —
Prices of 2-ethylhexyl acrylate are 1½c. per lb. higher in Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
2-Ethylhexyl alcohol, dms. c.l. dlvd. lb. .23¾- —
dms., l.c.l., dlvd. lb. .25¼- —
tanks, dlvd. lb. .21¼- —
Ethyl iodide, cbys., works lb. 3.30 - —
Ethyl methacrylate, dms., c.l., frt. equald lb. .52 - —
dms., l.t.l. frt. equald. lb. .52½- —
tanks, frt. equald. lb. .50 - —
Ethyl morphine hydrochloride, USP, bots oz. 11.85 - —
Ethyl oenanthate, dms. lb. 1.05 - 1.30
Ethyl oxalate (see Diethyl oxalate)
Ethyl silicate, dist. (see Tetraethyl orthosilicate).
Ethyl silicate, 40% available, SiO_2, dms., c.l., dlvd lb. .44½- —
dms., l.c.l., dlvd. lb. .46 - —
tanks, dlvd. lb. .42 - —
N-Ethyl-a-naphthylamine, dms., works, lb 1.02 - —
N-Ethyl-m-toluidine, tech., liq., tanks, frt. alld lb. .83 - —
N-Ethyl-o-toluidide, bbls lb. .88 - —
Ethylamine (see Mono-, Di-, or Tri-).
N-Ethylaniline, dms., c.l., frt. alld. lb. .57 - —
dms., l.c.l., frt. alld. lb. .58 - —
tanks, frt. alld. lb. .55 - —
Ethylbenzene 99% dms. c.l. or t.l., frt. equald lb. .15 - —
dms., l.c.l., same basis lb. .17 - —
tanks, same basis lb. .12½- —
2-Ethylbutyl alcohol, dms., c.l., works lb. .30 - —
dms., l.c.l., works lb. .30¾- —
tanks, works lb. .28 - —
Ethylene, contract, ref'y. gate lb. .0475- .0525
Ethylene dibromide, dms., c.l., frt. equald lb. .30½- —
dms., l.c.l. frt. equald. lb. .31½- —
tanks, frt. equald lb. .28½- —
Ethylene dichloride, dms., c.l., dlvd. lb. .11½- —
dms., l.c.l., same basis lb. .13 - —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb. higher.
Ethylene glycol, indust., dms., c.l., dlvd. E lb. .16 - —
dms., l.c.l., same basis lb. .17½- —
tanks, same basis lb. .13½- —
Ethylene glycol monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
dms., l.c.l., dlvd. E lb. .23½- —
tanks, dlvd E. lb. .19½- —
Ethylene glycol monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Ethylene glycol monoethyl ether acetate, dms., c.l., dlvd. E lb. .19½- —
dms., l.c.l., dlvd. E. lb. .20½- —
tanks dlvd., E lb. .17 - —
Ethylene glycol monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
dms., l.c.l., dlvd. E lb. .22½- —
tanks, dlvd. E lb. .18½- —
Ethylene glycol monomethyl ether acetate dms., c.l., dlvd. E lb. .29 - —
dms., l.c.l., dlvd. E. lb. .29¾- —
tanks, dlvd E. lb. .27 - —
Ethylene glycol monostearate, triple pressed, dms lb. .33 - .35
Ethylene oxide, dms. c.l., dlvd. E. lb. .21½- —
dms., l.c.l., dlvd. E. lb. .24½- —
tanks, dlvd. E. lb. .15½- —
Ethylene trichloride (see Trichloroethylene)
Ethylenediamine, 85-88%, dms., c.l., dlvd. E., 100% basis lb. .42 - —
dms., l.c.l., dlvd. E., 100% basis, lb. .43 - —
tanks, dlvd. E., 100% basis lb. .40 - —
Ethylvanillin, 100-lb. fib dms., 500-lb. lots and over lb. 6.75 - —
Eucalyptol, USP, cns., dms. lb. .85 - 1.40
Eucalyptus oil, NF, rectified, 70-75%, dms lb. .48 - .70
NF, rectified, 80-85%, dms lb. .53 - .80
Eugenol, tech., dms. lb. 1.45 - —
USP, dms. lb. 2.10 - 2.80
Euphorbia herb, bls. lb. .12 - .15

F

F salt, paste, tech., dms., works lb. 2.30 - —
Feldspar, 140-200 mesh, bulk, c.l., works ton 19.50 - —
Feldspar in bags $3 per ton. higher
Fennel oil, sweet, USP, cns. lb. 2.25 - 2.70
Fennel seed, Argentine, bgs. lb. .14 - —
French, light, bgs. lb. .20 - —
Indian, light, bgs. lb. .17 - —
Rumanian, bgs. lb. .14 - —
Yugoslav, light, bgs lb. .16½- —
Fenugreek seed, Moroccan, bgs lb. .07½- —
Ferric chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.50 - —
dms. l.c.l., works 100 lbs. 8.50 - —
Indust., cryst., bbls., c.l., works, 100 lbs. 5.25 - 6.75
bbls. l.c.l., works 100 lbs. 5.75 - 7.25
42°Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt equald, 100% basis 100 lbs. 4.00 - —
USP, cryst., dms., t.l., works lb. .08½- —
Ferric citrate, gran., dms. lb. .86 - —
Ferric hypophosphite, NF, dms lb. 3.45 - —
Ferric naphthenate, liq., 6% Fe, dms., frt. alld lb. .28¼- —
Ferric oxalate, tech., gran., 50-lb. dm., f.o.b. works E. lb. .89 - —
Ferric oxides (see iron oxides).
Ferric phosphate, NF, soluble, gran. pearls, cs lb. .72 - .75
Ferric pyrophosphate, NF VII, soluble, gran., pearls, dms. lb. .72 - —
Ferric resinate, 6¾% Fe., dms., ton lots, frt. alld. lb. .36½- —
Ferric stearate, dms., c.l., frt. alld. lb. .39 - —
dms., l.c.l., frt. alld. lb. .40 - .44
Ferric sulfate, partly hydrated, bgs., c.l. works ton 35.25 - —
bgs., l.c.l., works ton 36.25 - 42.25
bulk, c.l., works ton 33.25 - —
Ferric-ammonium citrate, brown, pearls, NF, gran., dms. lb. .65 - .68
Green, pearls, USP XII, gran., dms. lb. .66 - .69
Ferric-ammonium oxalate, fine gran., dms lb. .27½- .29½
Ferric-potassium oxalate, fine gran., dms. lb. .32½- .34½
Ferric-sodium oxalate, fine gran., dms lb. .27½- .29½
Ferrous gluconate, USP, 200-lb. dm., frt. equald. lb. .96 - —
Ferrous sulfate, gran., bgs., c.l., works ton 34.50 - —
bgs., l.c.l., dlvd. Metropolitan area, 100 lbs. 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP, cryst., bbls., dms. lb .09½- .10
Fir balsam, Canada, bbls. gal. 32.00 - 35.00
Oregon, bbls. gal. 3.40 - 4.64
Fir oil, Canada, cns. lb. 1.75 - 2.50
Fish oil, refd., alkali, dms. lb. .1300- .1350
Kettle-bodied, dms. lb. .1330- .1380
Light-pressed, dms. lb. .1150- .1200
tanks lb. .10 - —
Fishliver oil, high potency, 100,000 A units per gram, dms. 1,000,000 units. .16 - —
200,000 A units per gram, dms. 1,000,000 units. .17½- —
500,000 A units per gram, dms.,
Fishmeal, dom., menhaden, 60% protein, grd., bgs., Atlantic coast ton 115.00 - —
Fishscrap, dom., menhaden, dried, 60% protein, grd., bgs., Atlantic coast ton 111.00 - —
Fleaseed (see Psyllium seed).
Folic acid USP, bots., fib dms., kilo lots or more gram. .30 - .44
10% feed grade, fib dms., 3 kilos or more kilo. 30.00 - 44.00
Formaldehyde, 37%, (inhibited 7 to 8% methanol), USP, dms., c.l., dlvd lb. .0670- —
tanks, dlvd. lb. .0405- —
37%, (inhibited 12 to 15% methanol), USP, dms., c.l., dlvd. lb. .0695- —
tanks, dlvd. lb. .0430- —
Formaldehyde, metnanol-free (uninhibited), tanks, dlvd lb. .0375- —
Formic acid, 85% cbys., c.l., works, lb. .1570- —
cbys., l.c.l., works lb. .1620- .1720
90% cbys., c.l., works lb. .1625- —
cbys., l.c.l., works lb. .1675- .1775
Fringetree bark, bls. lb. .65 - .70
Fuller's earth, bgs., c.l., fil. mines, ton 19.00 - —
Calcined, bgs., c.l., same basis, ton 20.00 - 21.75
Insecticide grade, dried, powd., bgs., c.l., Ga. or Fla. mines, ton 17.50 - —

Which of these 3 products and services can you use from BECCO?



TECHNICAL BULLETINS DESCRIBING H_2O_2

We got 'em—
You can have 'em—
They're FREE!

Years of experience in working with Hydrogen Peroxide have produced a wealth of information on this valuable compound, its properties, and reactions. Much of this information is available virtually exclusively from Becco. We've compiled a number of Technical Bulletins, which are yours free on request. Simply decide which ones you want, and mail the coupon below.

No. 2—Hydrogen Peroxide (general information)

No. 41—Becco H_2O_2 35% HP (high purity)

No. 42—Becco H_2O_2 35% Formula D (for preparing dilute solutions)

No. 46—Concentrated H_2O_2 (over 50% concentration)

No. 70—Becco Hydrogen Peroxide SP "100" (Super Pure, of virtually 100% concentration.)

Where can you use these *other* Becco PEROXIDES?

By "other", we mean "Other than Hydrogen Peroxide". Lots of otherwise knowing people labor under the impression that Becco makes only H_2O_2. Actually, there are quite a few "other" useful peroxides in Becco's catalog, some of which are especially suited to high-temperature oxidation reactions.

Look over the list below. Give you ideas? Remind you of a problem you've got? Either way, a note to Becco will bring you more information. Or, use the handy coupon.

UREA PEROXIDE—for use in hair dyeing and cold waving, disinfectants, hypo eliminators, and as a source of water-free H_2O_2.

SODIUM CARBONATE PEROXIDE—for compounding detergents and adhesives.

SODIUM PERBORATE—for use in dyestuff development, detergents, tooth-powders; as a mild bleaching agent and cold wave neutralizer.

CALCIUM PEROXIDE—for dough conditioning and in high-temperature oxidation reactions.

MAGNESIUM PEROXIDE—an antifermentative, for compounding antacids and laxatives.

ZINC PEROXIDE—for use as a disinfectant and deodorant in dusting powders, ointments, etc.

Emery Industries, Inc.
CARLISLE CHEMICAL WORKS, INC.
ARGUS CHEMICAL
REICHHOLD

Over 100,000,000 pounds of plasticizers have been made with Becco proved-in-production epoxidation processes, using Becco H_2O_2!

Practically everyone who manufactures plasticizers is using a Becco epoxidation technique or a slightly modified version.

Since 1950 Becco has been foremost in research and development of the epoxidation of unsaturated fatty acid esters.

Take advantage of these years of experience. Write immediately, outlining your particular interest, or request a free copy of Becco Bulletin No. 69—"Epoxidation and Hydroxylation with Becco Hydrogen Peroxide and Peracetic Acid". Use the handy coupon below.

BECCO fmc BECCO fmc BECCO fmc

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo 7, New York
Dept. OPDR-M

Gentlemen:
Please send me the free Technical Bulletins checked below:

☐ #2 ☐ #41 ☐ #42 ☐ #46 ☐ #70

NAME_____
FIRM_____
ADDRESS_____
CITY_____
ZONE_____ STATE_____

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo 7, New York
Dept. OPDR-K

Gentlemen:
Please send me
☐ Becco Bulletin No. 1—"Active Oxygen Chemicals".
☐ Detailed information on _____

NAME_____
FIRM_____
ADDRESS_____
CITY_____
ZONE_____ STATE_____

BECCO CHEMICAL DIVISION, FMC
Station B, Buffalo 7, New York
Dept. OPDR-N

Gentlemen:
Please send me a free copy of Becco Bulletin No. 69.

NAME_____
FIRM_____
ADDRESS_____
CITY_____
ZONE_____ STATE_____

Fuller's earth, oil-bleaching grade, 100-mesh, bgs., c.l., same basis, ton 16.30 -17.00
200 mesh bgs. c.l. same basis ton 17.50 18.00
Spent bgs. c.l. ship't point ton 4.50 5.00
Fumaric acid, tech., 250-lb. dms., c.l., frt. alld lb. .27¼- —
dms. l.c.l. same basis lb. .28¼- —
Prices of fumaric acid 1½c per lb higher west of Denver.
Furfural, dms. c.l. works lb .13 —
dms. l.c.l., works lb. .14 - —
tanks divd W lb .13 —
tanks divd E lb .12 —
Furfural alcohol, cns., works lb. .29 - —
dms. l.c.l., Memphis, Tenn lb .21 - —
tanks, Memphis Tenn lb .184 - —
Furfuryl alcohol dms. c.l. Newark, N J lb .21½ —
dms l.c.l. Newark N J lb .22½- —
Fusel oil refd. dms., c.l. divd lb .18 —
dms. l.c.l. divd lb .19½ —
tanks divd lb .15½- —

G

G salt bbls. frt alld. 100% basis lb 73 - —
Gallic acid NF VII bbls. 1,000 lb lots lb 2.00 —
bbls. smaller lots lb 2.02 2.22
Tech., bbls., 1,000-lb. lots lb 1.78 - —
bbls. smaller lots lb 1.80 2.00
Gamma acid, dry grd., bbls., frt. Paste nuts. frt. alld lb 1.70 - —
Gammapicoline (see g-picoline).
Garlic oil dom. bots. oz 4.75 6.05
Imp bots oz. 4.50 5.00
Gaultheria oil (see Wintergreen oil).
Gelatin, edible, pure pork skin, 75 AOAC test, bbls. c.l. lb. .53 - —
150 AOAC test, bbls. c.l. lb. .62 - —
200 AOAC test bbls c.l. lb. .68 - —
225 AOAC test bbls. c.l. lb 70 - —
275 AOAC test bbls. c.l. lb 78 - —
Gelsemium root, bls lb. .30 - .35
Gentian root bls lb .24 - —
Grd., bbls., bxs lb. .30 - —
Powd., bbls. bxs lb .30 - —
Geraniol extra cns. dms lb 2.00 3.65
Soap grade, dms lb. 1.05 - 1.30
Standard cns. dms lb 2.00 3.40
Geranium oil, Algerian, cns lb. 19.00 - —
Bourbon, cns. lb. 18.00 - —
Geranium oil Turkish (see Palmarosa oil).
Geranyl acetate, cns lb. 1.90 2.70
Ginger oil, dist. bots lb. 10.50 -14.00
Ginger oleoresin NF from African root, bots. lb. 4.25 - 5.00
NF from Jamaican root, bots. lb. 7.75 - —
Ginger root, Cochin, bgs lb. 16 - —
Jamaican, No. 3, bgs lb. .32 - —
Nigerian, split bgs lb. .13 - —
Sierra Leone, bgs lb. .19 - —
Glauber's salt (see Sodium sulfate).
Gluconic acid, tech., 50% dms., c.l., t.l., frt. alld lb. .18 - —
dms. l.c.l., frt. alld. lb. .20¼- —
tanks, frt. alld. lb. .13½- —
Glue, bone, extracted, dry bone, 86 jellygrams, bgs. c.l., divd. lb. .16 - —
131 jellygrams, bgs., c.l., same basis lb. .16½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
191 jellygrams, bgs., c.l., same basis lb. .19½- —
222 jellygrams, bgs., c.l., same basis lb. .21 - —
Glue, bone, green, 40 jellygrams, bgs., c.l., same basis lb. .16- —
86 jellygrams, bgs., c.l., same basis lb. .16 - —
115 jellygrams, bgs., c.l., same basis lb. .16½- —
135 jellygrams, bgs., c.l., same basis lb. .17½- —
164 jellygrams, bgs., c.l., same basis lb. .18½- —
180 jellygrams, bgs., c.l., same basis lb. .19½- —
200 jellygrams, bgs., c.l., same basis lb. .20½- —
Bone glue, l.c.l. prices 2c. higher.
Glue, hide, 70-94 jellygrams, bgs., c.l., divd lb. .17 - —
95-121, bgs., c.l., divd. lb. .17 - —
122-149, bgs., c.l., divd lb. .19½- —
150-177, bgs., c.l., divd lb. .22 - —
178-206, bgs., c.l., divd lb. .24½- —
207-236, bgs., c.l. divd lb. .27 - —
237-266, bgs., c.l., divd. lb. .29 - —
267-298, bgs., c.l., divd lb. .31 - —
299-330, bgs., c.l., divd. lb. .33 - —
331-362, bgs., c.l., divd lb. .35 - —
363-394, bgs., c.l., divd lb. .37 - —
Glue, hide, 395-427, bgs., c.l., l'vd. lb. .39 - —
428-460, bgs., c.l., divd lb. .41 - —
461-494, bgs., c.l., divd lb. .42 - —
495-529, bgs., c.l., divd lb. .45 - —
Hide glue l.c.l. prices 2c higher.
l-Glutamic acid, 99½%, fib. dms., 100-lb lots, frt alld lb. 1.80 - —
fib. dms., 25-lb. lots, frt. alld. lb. 1.88 - —
l-Glutamine, bots., 1-9 kilo lots, kilo. 150.00 -300.00
50-kilo lots kilo. 100.00 - —
500-kilo lots kilo. 75.00 - —
Glycerine, dom., nat., crude, saponification, 88%, tanks, divd lb. .20½- .21
nat. crude soaplye 80% tanks, divd lb. .18½- .19
Nat., refd., USP CP, 99%, dms., c.l., divd lb. .30¾- —
dms., l.c.l., divd lb. .31½- —
tanks, divd. lb. .29¼- —
Nat., refd., USP, CP, 96%, dms., c.l., divd lb. .30 - —
dms., l.c.l., divd lb. .30¾- —
tanks, divd. lb. .28¼- —
Nat., high gravity, dms., c.l., divd. lb. .30¾- —
dms., l.c.l., divd lb. .31½- —
tanks, divd lb. .29 - —
Syn., dms., c.l., divd. lb. .31 - —
dms., l.c.l., divd. lb. .31¾- —
tanks, divd. lb. .29¼- —
Imp., nat., crude, soaplye, 80%, c.i.f lb. .19 - 20½
Glycine (see Aminoacetic acid).
Glycerol (see Glycerine).
Glycolic acid (see Hydroxyacetic acid).
Glyoxal, 30%, dms., c.l., works lb .20½ —
dms., l.c.l works lb. .21¼- —
tanks works lb. .18 —
Golden seal root, NF, tested, bls. lb. 2.75 - 3.25
Gramicidin 1 to 5 kilos f.o.b. works. gram 4.70 —
Grapefruit oil, dms lb. 1.95 - 2.50
Graphite, amorp, powd., bgs., fib dms., ex whse lb .06 - .09½
cryst. 88-90% powd. bgs. fib. dms ex whse lb. .19 - .21½
cryst., 90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
powd., bgs., fib. dms., ex whse. lb. .29 - .31½
Graphite, flake, No. 1 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2, 90-95% bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice all hog, tanks, divd lb. .06⅜- .06½
Yellow, tanks, divd lb. .04⅞- .05
Grease oil, No. 1 dms. c.l. lb .14¾ Nom.
dms., l.c.l. lb. .15¾ Nom.
Extra winter strained, dms., c.l. lb. .17¼ Nom.
dms., l.c.l lb. .18¼ Nom.
Prime, burning, dms., c.l lb .18¾ Nom.
dms., l.c.l. lb. .19¾ Nom.

GREEN PIGMENTS
Green pigment quotations are listed individually. For example, prices on Green, chrome, may be found in the C's under Chrome green.

Grindelia robusta herb bls lb 45 —
Guaiacol, NF, cryst., dms., tins lb. 2.10 - 2.15
NF, liq., cbys., dms lb 2.30 - 2.40
Guaiacol carbonate NF VII. dms. lb 3.40 3.45
Guaiacwood oil cns lb. 75 - 1.30
Guar gum, food grade bgs., c.l lb. .38 - —
bgs., 5,000 lbs. or more lb. .39 - —
Indust., bgs., c.l. lb. .32 - —
Tech grade, bgs. lb .30 - .33

GUMS
Gum quotations are listed individually. For example, prices on Gum, Dammar, may be found in the D's under Dammar gum.

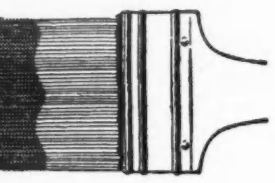
Gypsum, plaster of Paris, 100-lb paper bgs., trucks, divd New York ton 20.30 - —
Terra alba, dom., 100-lb paper bgs., trucks, same basis ton 20.00 - —
100-lb paper bgs., trucks, works, New York ton 17.00 - —
Terra alba, imp., English, 100-lb. paper bgs., l.c.l., ex dock, New York ton 55.00 - —
100-lb paper bgs. ex whse ton 60.00 -62.00

H

H acid, dry, bbls. c.l., frt. alld., 100% basis lb. .90 - —
bbls. l.c.l. same basis lb. .95 - —
Hansa yellow 10 G. bbls. divd E. of Rockies lb 2.45 - —
Hansa G yellow pigment bbls lb 2.20 - —
Hawthorn berries, bgs. lb .18 - .20
Heliotropin, 100-lb. lots, dms lb. 2.60 - 3.40
Hellebore root dom. green bls lb 70 - .75
Helonias root bls lb. 1.50 - —
Hemlock oil, cns lb. 2.55 - 3.00
Henbane leaves, bls lb. .30 - .35
Heptachlor, dms., c.l., t.l., 100% basis frt alld lb. .96 - —
Heptane, industrial, tankcars, New Jersey and New York, gal. .20 - —
Houston, Texas gal. .1625- —
Hesperidin purif. 100-lb fib. dms., f.o.b., works lb 8.95 - —
Hesperidin methylchalcone, bots., 50-lb lots, works lb. 22.50 - —
bots., 5-lb lots, works lb. 23.00 - —
bots., 1-lb lots, works lb. 23.50 - —
Hexachloropnene, dms., 1,100 lbs., or more lb. 1.84 - —
dms., to 1,100 lbs lb. 1.94 - —
Hexalin (see Cyclohexanol)
Hexamethylenetetramine, tech. bgs., 20,000-lb lots or more, Perth Amboy or New York City lb. .233 - —
bgs., 1,000-19,999-lb lots, same basis lb. .243 - —
bgs. smaller lots same basis lb. .253 - —
fib dms. 1,000-lb lots or more, same basis lb. .250 - —
fib. dms., smaller lots, same basis lb. .253 - —
USP bgs. 500 lbs or more f.o.b. Fords N J., divd New York City and Philadelphia, lb., 42½- —
bgs. smaller lots same basis lb .43½- .48¼
Hexane, industrial, tankcars, New Jersey and New York, gal. .20 - —
Houston, Texas gal. .16 - —
1-Hexanol, dms., c.l. works lb. .35 - —
dms., l.c.l. works lb. .35¾- —
tanks works lb. .33 - —
Hexyl cinnamic aldehyde dms lb. 4.00 7.50
n-Hexyl methacrylate, dms., c.l., works lb. .75½- —
dms. l.c.l. works lb. .76 - —
Hexyl salicylate, dms. lb. 1.75 - —
Hexylene glycol, dms., c.l., divd lb .17¼- —
dms., l.c.l. divd lb. .19 - —
tanks, divd. lb. .15 - —

Almost any

Surface Coating



can be improved with an alkyd or polyester formulation based on Oronite Isophthalic

Contact your resin or paint supplier. Ask about his alkyd and polyester formulations employing Oronite Isophthalic. Oronite has made available to resin and paint producers a series of suggested Isophthalic alkyd and polyester formulations, together with resin samples, cooking techniques and testing methods. Superior coatings, based on Oronite Isophthalic, are now being offered in every protective coating classification.

Write Oronite, the only experienced Isophthalic source, on how its new basic material can up-grade the coatings you use or market.

ORONITE CHEMICAL COMPANY
A CALIFORNIA CHEMICAL COMPANY SUBSIDIARY
EXECUTIVE OFFICES • 200 Bush Street, San Francisco 20, California
SALES OFFICES • New York, Boston, Wilmington, Chicago, Cincinnati, Cleveland, Houston, Los Angeles, San Francisco, Seattle
Foreign Affiliate: California Chemical International, Inc., San Francisco, Geneva, Panama

8858

Hexylresorcinol, USP, dms., 25-lb. lots or more, dlvd.	lb.	14.00	—
dms., smaller lots, dlvd.	lb.	14.50	—
Homatropine hydrobromide, USP, bots.	oz.	3.50	—
Homatropine methylbromide, USP, bots.	oz.	3.25	—
Hoofmeal, 17-18% ammonia, bulk, c.l., Chicago, unit-ton		6.75	—
Horehound herb, bls.	lb.	.16	.19
Hydrastis (see Goldenseal).			
Hydrazine hydrate, 85% ret. dms., works	lb.	1.35	1.55
100%, ret. dms., works	lb.	1.60	1.90
Hydriodic acid, 1.50 s.g., cbys.	lb.	2.92	—
1.70 s.g. cbys.	lb.	3.23	—
Hydroabietyl alcohol, tech., solid, dms., c.l., dlvd. zone 1	lb.	.29¼	—
dms., l.c.l., dlvd. zone 1	lb.	.29¾	.30¼
tanks, dlvd. zone 1	lb.	.27¼	—
Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo., and the western part of Texas.			
Hydrobromic acid, medicinal, 48%, cbys., frt. equald	lb.	.48	.56
Hydrochloric acid, anhyd. (see Hydrogen chloride)			
Hydrochloric acid, 18°, cbys., c.l., works, 100 lbs.		2.50	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		2.90	3.05
tanks, works, frt. equald	ton	28.00	—
20°, cbys., c.l., works, 100 lbs.		2.75	—
cbys., l.c.l., dlvd. Metropolitan area 100-lbs.		3.15	—
tanks, works frt. equald	ton	30.00	—
22°, cbys., c.l., works, 100 lbs.		3.25	—
cbys., l.c.l., dlvd. Metropolitan area 100 lbs.		3.65	—
tanks, works frt. equald	ton	35.00	—
CP, USP, consumers cbys., extra, c.l., works	lb.	.15¾	—
cbys., l.c.l., same basis	lb.	.17¼	.17½
Hydrochloric acid, 5-pint bots., extra cs., c.l., same basis	lb.	.20¾	—
Hydrocortisone acetate bulk, bots., kilo lots or more	gram.	1.15	1.20
Hydrocortisone alcohol bulk, bots., kilo lots or more	gram.	1.15	1.20
Hydrocyanic acid, dilute, NF, 2%, 5-lb. bots	lb.	.40	—
Hydrofluoric acid, anhyd. (see Hydrogen fluoride)			
Hydrofluoric acid, aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd. 100 lbs.		19.25	—
55-gal. dms., l.c.l., t.l., dlvd. 100 lbs.		20.73	—
20-gal. dms., c.l., t.l., dlvd. 100 lbs.		21.00	—
20-gal. dms., l.c.l., t.l., dlvd. 100 lbs.		22.50	—
tanks, works, frt. equald, 100 lbs.		15.50	—
Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington and Wyoming. In those states add $2.70 per cwt. for drum delivery.			
Hydrofluosilicic acid, dms., works, 30% basis	lb.	.06	—
Hydroxamide, dms., fib. ctns., works	lb.	.30	.40
50-lb. cyls., l.c.l., works	lb.	.55	.60
Hydrogen chloride, anhyd., 50-lb. cyls., l.c.l., works	lb.	.45	—
Hydrogen cyanide, liq., 98%, tanks, works	lb.	.14	—
Hydrogen fluoride, anhyd., cyls., dlvd. E	lb.	.30½	.32½
cyls. dlvd. W.	lb.	.39	—
tanks, works	lb.	.21	—
Hydrogen peroxide 35%, dms., c.l., dlvd	lb.	.202	—
dms., l.c.l., dlvd.	lb.	.211	—
tanks, dlvd.	lb.	.1800	—
Hydroquinone, photo grade, dms.	lb.	1.10	1.13
Tech., dms., c.l., dlvd.	lb.	.82½	—
dms., l.c.l., dlvd.	lb.	.84½	—
Hydroxyacetic acid, tech., 70%, dms., Philadelphia and Chicago	lb.	.11	—
tanks, Belle, W. Va.	lb.	.073	—
Hydroxycitronellol, cns.	lb.	3.75	—
Hydroxyethyl cellulose, low viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point	lb.	.96	—
fib. dms., 2,000 to 19,999-lb. lots, same basis	lb.	.99	—
fib. dms., 150 to 1,999-lb. lots, same basis	lb.	1.02	—
fib. dms., less than 150-lb. lots, same basis	lb.	1.12	—
Hydroxyethyl cellulose high viscosity grades, fib. dms., 20,000-lb. lots or more, f.o.b. shipping point	lb.	1.01	—
fib. dms., 2,000 to 19,999-lb. lots, same basis	lb.	1.04	—
fib., dms., 85 to 1,999-lb. lots, same basis	lb.	1.07	—
fib. dms., less than 85-lb. lots same basis	lb.	1.17	—
Hyoscine salts (see Scopolamine)			
Hyoscyamine hydrobromide, bots	oz.	7.00	—
Hyoscyamine sulfate, bots.	oz.	7.00	—
Hypophosphorous acid, purif. 50% cbys., ton lots, f.o.b. works	lb.	.85	—
NF, 30%, cbys., all quantities, same basis	lb.	.75	—

I

Ichthammol, NF, dms.	lb.	.75	1.05
Indigo (see Dyes coaltar, 1171 indigo, syn).			
Indole, CP, bots.	lb.	14.75	18.25
Inositol, bots., dlvd.	lb.	5.00	—
dms., dlvd.	lb.	4.50	4.75
Insect flowers (see Pyrethrum).			
Iodine, crude, kgs.	lb.	.95	—
Resub., USP, dms., f.o.b. works	lb.	2.00	2.02
Iodochlorohydroquinolin, USP, dms.	lb.	3.60	—
Iodoform, NF, dms., kgs.	lb	4.90	5.00
a-ionone, cns.	lb.	3.85	5.00
b-ionone, cns	lb.	3.85	5.85
Ipecac root, whole, bgs	lb	8.00	8.50
Powd., bbls, bxs.	lb	9.50	10.00
Irish moss, bleached, prime, bls	lb.	.22	.25
Iron blue, alkali-resisting, bbls., c.l., dlvd. E	lb.	.57	—
bbls, l.c.l. ton lots same basis,	lb.	.58	—
bbls, smaller lots same basis	lb.	.59	—
Iron blue, dom. reg., bbls., c.l., dlvd E	lb.	.52	—
bbls., l.c.l., ton lots, same basis	lb.	.53	—
bbls., l.c.l., smaller lots, same basis	lb.	.54	—
Iron blue, imp., British, reg., bbls., c.l., dlvd. E	lb.	.43	—
bbls., l.c.l., ton lots, same basis	lb.	.49	—
bbls., l.c.l., smaller lots, same basis	lb.	.50	—
Iron blue dlvd. prices 1c. higher for Pacific Coast states:—Wash., Ore., Cal., N. M., Ariz. Mon. Wyo. Utah, Col and Nev.			
Iron compounds (see Ferric or Ferrous)			
Iron oxide, black, pure, bgs., c.l., works	lb.	.14¾	—
bgs., l.c.l., works	lb.	.15	—
Iron oxide, brown, pure, bgs., c.l., works	lb.	.14¼	—
bgs., l.c.l., works	lb.	.14½	—
Iron oxide, metallic, brown, bgs., works	lb.	.05¼	—
Iron oxide, Persian Gulf, red, bgs., c.l., works	lb.	.08¾	—
Iron oxide, red, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, New York City	lb.	.14¼	—
Iron oxide, red, nat., 75-85% ferric oxide, bgs., c.l., works	lb.	.06¼	—
bgs., l.c.l., works	lb.	.06½	—
Iron oxide, Spanish red, bbls., c.l., ex dock	lb.	.05¾	Nom.
bbls., l.c.l., ex dock	lb.	.06	Nom.
bbls., l.c.l., ex whse. New York	lb.	.06½	Nom.
Iron oxide, yellow, nat., French type, bgs., c.l., works	lb.	.06¼	—
Peruvian type, bgs., l.c.l.	lb.	.023	.024
Iron oxide, yellow, pure, light lemon shade bgs., c.l. works	lb.	.12¼	—
Other shades, same basis	lb.	.12	—
Isoamyl alcohol, dms., c.l., works, frt. alld. E	lb.	.27½	—
dms., l.c.l., same basis	lb.	.29	—
tanks, same basis	lb.	.25	—
Isoborneol, cns.	lb.	1.44	1.80
Isobornyl acetate, cns.	lb.	.46	.56
Isobornyl formate, dms.	lb.	1.20	—
Isobornyl proprionate, dms.	lb.	1.25	1.35
Isobutyl acetate, perfume grade, cns.	lb.	.33	—
Isobutyl acetate, solvent grade, dms., c.l., dlvd. E. of Rockies	lb.	.15¼	—
dms., l.c.l. same basis	lb.	.16¾	—
tanks, same basis	lb.	.12¾	—
Isobutyl alcohol, dms., c.l., dlvd.	lb.	.15½	—
dms., l.c.l., dlvd.	lb.	.17	—
tanks, dlvd.	lb.	.13	—
Isobutyraldehyde, CP, dms., c.l., dlvd.	lb.	.27½	—
dms., l.c.l., dlvd.	lb.	.28½	—
Tech., dms., c.l., dlvd.	lb.	.22	—
dms., l.c.l., dlvd.	lb.	.23	—
tanks, dlvd.	lb.	.19½	—
Isoeugenol, cns.	lb.	3.40	4.25
Isoniazid, powd., bulk, kilo or more	kilo	18.00	—
Isonicotinic acid, 100-lb. fib dms., works	lb.	4.25	—
Isonicotinic acid hydrazide (see Isoniazid).			
Iso-octyl alcohol, dms., c.l., dlvd. E.	lb.	.23½	—
dms., l.c.l., dlvd. E	lb.	.25	—
tanks, dlvd. E.	lb.	.21	—
Isopentane, coml. grade, tanks, f.o.b. Tex. refy.	gal.	.15½	—
Isophorone, dms., c.l., works	lb.	.24½	—
dms., l.c.l., works	lb.	.25¼	—
tanks, works	lb.	.22½	—
Isophthalic acid, dms., c.l., works, frt. equald	lb.	.152	—
dms., l.c.l., same basis	lb.	.162	—
Isopropanol (see Isopropyl alcohol).			
Isopropyl acetate, dms., c.l., dlvd.	lb.	.14	—
dms, l.c.l., same basis	lb.	.15½	—
tanks, same basis	lb.	.11½	—
Isopropyl alcohol, refd., 91%, dms., c.l., dlvd	gal.	.58	—
dms., l.c.l., dlvd	gal.	.68	—
tanks, dlvd.	lb.	.42	—
Refd., 95%, c.l., dem., dlvd	gal.	.60	—
dms., l.c.l., dlvd	gal.	.70	—
tanks, dlvd	gal	44	—
anhyd., c.l., dlvd.	gal.	.62	—
dms., l.c.l., dlvd	gal.	72	—
tanks, dlvd.	gal	46	—
Isopropyl benzene (see Cumene).			
Isopropyl ether, dms., c.l., dlvd	lb.	.09½	—
dms., l.c.l., dlvd	lb.	11	—
tanks, dlvd	lb.	.07	—
Isopropyl-N-(3-chlorophenyl) carbamate (CIPC), tech., dms., c.l., t.l., works	lb	1.00	—
dms., l.c.l., works	lb	1.05	1.25
tanks, works	lb.	.99	—
Isopropylamine (see Mono, Di, or Tri-).			
Isopropyl-N-phenyl carbamate, 450-lb. fib. dms., c.l., t.l., works	lb.	.75	—
450-lb fib. dms., l.c.l., works	lb	.80	.90
Isoquinoline, dms., works	lb.	.65	1.25
Itaconic acid, refd. bgs. c.l., f.o.b. works	lb.	.53½	—
bgs., l.c.l., same basis	lb.	.54½	—
Tech., bgs., c.l., same basis	lb.	.38½	—
bgs., l.c.l., same basis	lb.	.39½	—

J

J acid, paste, bbls., works, 100% basis	lb	2.70	—
Powd., bbls., same basis	lb	2.75	—

Get your copy of this BRAND-NEW 63-P.

SOLVAY HYDROGEN PEROXIDE TECHNICAL BULLETIN!

Sodium Nitrite • Caustic Soda • Calcium Chloride • Chlorine • Chloroform
Caustic Potash • Potassium Carbonate • Sodium Bicarbonate • Soda Ash
Ammonium Chloride • Methyl Chloride • Ammonium Bicarbonate • Vinyl Chloride
Methylene Chloride • Cleaning Compounds • Hydrogen Peroxide • Aluminum
Chloride • Mutual® Chromium Chemicals • Snowflake® Crystals • Monochlorobenzene • Ortho-dichlorobenzene • Para-dichlorobenzene • Carbon Tetrachloride

Allied Chemical

SOLVAY PROCESS DIVISION
61 Broadway, New York 6, N. Y.

SOLVAY® branch offices and dealers are located in major centers from coast to coast. Send export inquiries to Allied Chemical International, 40 Rector St., N. Y. 6.

SOLVAY PROCESS DIVISION
Allied Chemical Corporation, 61 Broadway, New York 6, N. Y.

Please send without obligation your new Solvay Technical and Engineering Service Bulletin No. 19, "Hydrogen Peroxide."

☐ I use hydrogen peroxide principally for _____

Name _____
Position _____
Company _____
Phone _____
Address _____
City _____ Zone _____ State _____ DV-129A

Jalap root, NF, bls. ..... lb. .90 - —
NF, powd., bbls., bxs. ..... lb. 1.15 - —
Japan wax, cs ..... lb. .27 - .29
Juniper berries, bgs ..... lb. .16 - .17
Juniper berry oil, NF, bots..... lb. 2.90 - 3.75
twice rectified bots. ..... lb. 3.25 - —
Juniper tar oil NF dms ..... lb .42 - .60
Juniper wood oil, tech., cns. .... lb. .38 - .55

K

Kaolin (see also Clay China).
Kaolin, NF, powd., fib dms. .... lb. .10 - .12
NF, colloidal, 50-lb. bgs ..... lb. .15½- .17½
Karaya gum No 1 NF powd. bls lb. .45 - .48
No. 2, powd., bbls. ..... lb. .40 - .42
No 3, powd. bbls ..... lb. .35 - .37
Koch acid bbls., frt. alld., 100% basis lb 1.00 - —
Kola nuts bgs. ..... lb. .10 - —

L

L acid bbls works lb 1.25 - —
Lacquer diluent, petroleum, 140°F-200°F b.r., tankcars, New Jersey and New York gal. .20 - —
Group 3 ..... gal. .15125- —
Houston, Texas ..... gal. .16 - —
200°F-240°F b.r., tankcars, New Jersey or New York, gal. .20 - —
Group 3 ..... gal. .14125- —
Houston, Texas ..... gal. .16 - —

Lactic acid, edible, 50%, bbls. dms., c.l., frt. equald lb. .1985- —
bbls., dms., 20 or more, frt. equald lb. .2035- —
bbls. dms. 5 to 19 frt. equald, lb. .2085- —
bbls., dms., 1 to 4, frt. equald. lb. .2135- —
80%, bbls., c.l., dms., frt. equald. lb. .3335- —
bbls., dms., 20 or more, frt. equald lb. .3385- —
bbls. dms 5 to 19 frt. equald. lb. .3435- —
bbls., dms., 1 to 4 frt. equald. lb. .3485- —
Plastic grade, 50%, c.l., bbls., works lb. .2740- —
bbls. 20 or more. works lb. .2790- —
bbls., 5 to 19, works .... lb. .2840- —
bbls., 1 to 4, works ..... lb. .2890- —
80%, bbls., c.l., works..... lb. .4625- —
bbls. 5 to 19. works .... lb. 4725- —
bbls. 1 to 4. works lb. 4775- —
Tech., 44% bbls. c.l. works 100 lbs.12.45 - —
bbls., l.c.l., works... 100 lbs.12.85 - —
USP, 85% cbys. ..... lb. .85 - —
Lactose, crystalline, edible, bgs., 23,000-lb lots. frt equald lb. .14 - —
bgs. 6,000-lb lots, frt equald lb. .14½- —
bgs. 2,000-lb. lots, frt equald lb. .14¾- —
bgs., 200-lb lots. frt equald lb 15¼- —
Edible lactose in 6b. dms., ½c. higher.

Lactose, ferment. grade, bgs., c.l., works lb. .08½- —
USP, reg., fib. dms., 30,000-lb. lots, frt. equald. lb. .21½- —
fib. dms., 2,000-lb. lots, frt. equald lb, .22¼- —
200-1,880-lb. lots, frt. equald lb. .22¾- —
USP lactose in bags ½c to 1c lower
Lactose, USP, spray dried, bgs., t.l., frt. equald lb. .18½- —
bgs., t.t.l., frt. equald .. lb. .19 - .19¾
Lady's slipper root, bls. ..... lb. 3.50 3.75
Lake C red toner alizarine, bbls., works lb 1.25 - —
Lamp black, bgs., c.l., works ... lb. .16 - .45
Lanolin cosmetic, dms., works lb. .27 - .29
USP, anhyd., dms., works ... lb. .24 - .26
USP, hydrous, dms., works.... lb. .23 - .25
Lard, cash, dms., Chicago.... lb. .07½- —
Lard oil (see Grease oil).
Larkspur seed, bgs ..... lb. .55 - —
Laurel leaf oil, dms. cns. ..... lb 9.75 -12.50
Laurent's acid, bbls ..... lb. .70 - —
Lauric acid, pure, dms..... lb. .38½- .41
tanks ..... lb. .36 - .37
Lauryl alcohol, bots. ..... lb. 2.00 2.50
n-Lauryl methacrylate, dms., c.l., t.l. works lb. .65½- —
dms., t.t.l., works ..... lb. .66 - —
Lavandin oil, 22-24%, dms. ..... lb 1.10 - 1.50
Abrial, dms. ..... lb 1.00 1.50
Lavender flowers, medium, bls lb .55 - .60
Ord., bls. ..... lb. .20 - .25
Select., bls. ..... lb. .90 1.00
Lavender flower oil, USP, French 35-37% ester, cns. lb. 1.85 - 4.00
40-42% ester cns ..... lb 5.00 7.75
Spike, Spanish, cns. ..... lb. 2.20 3.00

Lead acetate, NF, cryst., gran., powd., bbls. lb. .34½- —
White, cryst., bbls. ..... lb. .25½- —
gran., bbls. ..... lb. .26½- —
powd., bbls. ..... lb. .26½- —
Lead arsenate acid powder, dealers, 3-50 lb. bgs or any quantity, frt. alld. on $150 or more lb. .30½- —
1-lb. bgs., same basis .... lb. .47 - —
Lead, blue, basic sulfate, bbls., c.l., shipt point, frt alld. ... lb. .17 - —
bbls., l.c.l., same basis ..... lb. .18 - —
Lead carbonate (see Lead, white, basic carbonate)
Lead chloride dms ..... lb. .52 - —
Lead iodide NF V jars ..... lb. 3.82 - —
Lead linoleate fused, 26% Pb dms. lb. .38 - —
Lead metal prime, pigs, New York. lb. .12½- —
St. Louis ..... lb. .1230- —
Lead monosilicate, bgs., c.l., works, frt. equald lb. .1385- —
bgs., l.c.l., same basis ..... lb. .1485- —
Lead naphthenate, liq., 16% Pb, dms., dlvd lb. .19½- —
24% Pb, dms., dlvd. lb. .24¼- —
Solid, 37% Pb. dms., dlvd. lb. .31¾- —
Lead nitrate, bbls. ..... lb. .24¼- .26¾
Lead orthosilicate-gel, 50-60% PbO, dms., works lb. .29¾ .34¼
Lead peroxide, tech. powd. bbls lb. .45 - .50
Lead phthalate dibasic dms. works. lb .41 - —
Lead, red, 95% Pb_3O_4 or less, bbls., c.l., works, frt. equald lb. .15¼- —
bbls., l.c.l., same basis.lb. .1775- —
97% Pb_3O_4, bbls., c.l., same basis lb. .1495- —
bbls., l.c.l., same basis .... lb. .1595- —
98% Pb_3O_4, bbls., c.l., same basis lb. .1510- —
bbls., l.c.l., same basis ... lb. .1610- —
Lead resinate precip 23% Pb. dms., ton lots dlvd lb .40¼- —
Lead salicylate normal dms. works. lb .46 - —
Lead silicate (see Lead white basic silicate).
Lead silicochromate, bgs., c.l., f.o.b. mfrs. point, frt. alld lb. .20 - —
bgs., l.c.l., same basis ..... lb. .21 - —
Lead sulfate (see Lead blue basic sulfate).
Lead tallate liq., 16% Pb. dms lb .15 - —
24% Pb. dms lb .21¼- —
Solid, 30% Pb. dms lb .23¼- —
Lead, white basic carbonate, bgs., c.l., shipt. pt. frt. alld lb. .18 - —
bgs., l.c.l., same basis ... lb. .19 - —
Lead, white basic silicate, bgs., c.l., shipt. pt. frt alld lb. .16½- —
bgs., l.c.l., same basis .... lb. .17½- —
Lead, white basic sulfate bgs., c.l., shipt. pt., frt. alld lb. .17 - —
bgs. l.c.l., same basis .... lb. .18 - —
Lecithin, edible, tech. bleached, non-ret dms. c.l. works. lb. .14 - .15
non-ret. dms., l.c.l., same basis lb .15 - .16
unbleached, non-ret dms. c.l., same basis lb. .13 - .14
non-ret. dms. l.c.l., same basis lb. .14 - .15
Lemon bioflavonoid complex, 100-lb. fib. dms., works lb. 7.70 - —
Lemon oil, USP Calif cns., dms. ½ 3.10 3.50
Messina, cns. lb. 3.75 5.00
Lemongrass oil, cns., dms ... lb. 1.75 - —
dl-Leucine, dms., works .... lb 12.25 -15.00
Licorice root, gran. bls ..... lb .13 - —
Powd., bls. ..... lb .15 - .16
Whole bls lb .09 - .10
Lignaloe wood oil, Mexican, cns lb 2.75 3.50
Lignosulfonate (see under ammonium or sodium lignin sulfonate)
Lime, chemical (quicklime), bulk, c.l., 50,000 lbs., works, E. ton.14.25 - —
Chemical, hydrated bgs., c.l., same basis ton 17.25 - —
Chemical, spray, bgs c.l., same basis ton.18.25 - —
For New York delivery, add $6.29 freight charge
Lime oil, dist., Mexican, cns .. lb. 5.90 - 6.75
West Indian, cns lb 6.50 7.80
Expressed, West Indian, cns lb 7.75 8.75
Lime salts (see Calcium).
Lime-ammonium nitrogen, 20.5% N (see Ammonium nitrate with dolomite).
Linalool, ex bois de rose oil, dms. lb. 2.90 - 3.75
Syn., 98-100%, dms., works .. lb. 3.20 3.60
Linalyl acetate, ex bois de rose 90-92% dms lb. 3.05 - 3.75
96-98% dms. lb. 3.60 - —
Syn., 98-100% dms. works lb. 3.40 - —
Lindane, 25% formulation to distributors dms., frt alld lb 1.35 1.50
Lindane tech to formulators dms. 1-2,000 lbs. dlvd lb 2.40 - —
Linden flowers, with leaves, bls lb. .35 - .40
Without leaves, bls ..... lb. .42 - .45
Linseed meal, expeller, 32% bulk, Minneapolis, mills .. ton.78.50 Nom.
Extracted, 34% bulk, same basis. ton.70.00 - —
Linseed oil, raw, dms., c.l., New York lb. .1760- —
dms., l.c.l., New York .... lb. .1850- .1925
tanks, f.o.b., Minneapolis . ton. .1400- —
tanks, New York ..... lb. .1511- —
tankwagon, New York ..... lb. .1561- —
Boiled linseed oil, .006c. per lb. higher.
Linseed oil, acid, dist., dms. .... lb. .2110- —
Water-white, dms. ..... lb. .2410- —
Litharge coml., powd. bbls., c.l., works, frt. equald lb. .1425- —
bbls., l.c.l., same basis ... lb. .1525- —
Lithium aluminum hydride, lump, dms. works lb.33.00 -39.00
Lithium benzoate dms lb 1.65 1.67
Lithium bromide, NF, gran., bgs., works, frt. equald lb. 2.60 - —
Lithium carbonate, NF, dms c.l., t.l. dlvd lb 1.29½ - —
dms., ton lots to t.l., dlvd lb 1.30 1.30¼
Tech., dms., c.l., t.l., frt alld lb .67 - —
dms., ton lots, same basis lb 73 - —
dms., smaller lots same basis. lb 79 - —
Lithium chloride, CP, anhyd., dms., ton lots lb 1.23½- —
Tech, anhyd., dms. c.l. t.l., dlvd. or works, frt alld lb .87 —
dms., l.c.l., same basis lb. .88 .92
Lithium citrate NF dms. ton lots lb 1.50 —
Lithium fluoride, dms., 20,000-lb lots, dlvd lb 2.15 —
bbls. ton lots and more dlvd lb 2.18½ —
bbls., less ton lots, dlvd lb 2.23½ —
Lithium hydride, powd., dms. 500-lb lots or more works lb 9.50 —
Lithium hydroxide, monohydrate, dms. c.l. t.l. frt alld lb .72 —
dms. l.c.l. frt alld lb .73 —
Lithium manganite dms. works lb .95 1.05
Lithium nitrate tech. dms., 100-lb lots lb 1.15 1.25
Lithium salicylate dms lb. 1.60 1.70
Lithium silicate, dms., works lb 1.10 1.20

ONE LABEL — *First Grade Only*
ONE PRICE — *That Saves You Money*
. . . and Perfect Performance for *Every* Purpose!

M. C. P.
Pure
Unadulterated
California
LEMON OIL
U. S. P.

An *Exclusively First Grade Lemon Oil* . . . Cold Pressed in California . . . and *Packed by the Producer* to Assure Highest Quality

For nearly 30 years, Mutual Citrus Products Co. has been cold-pressing California lemon oil for distribution by others. Now, M.C.P. LEMON OIL is being *prepared and packed* under the M.C.P. label. There is only *one label* and *one* quality — *the highest* — for M.C.P. LEMON OIL. Yet, M.C.P. LEMON OIL costs you *less* . . . while providing a product that is unsurpassed for flavor, purity, and dependability . . . for *every* purpose.

Produced and Packed by
MUTUAL CITRUS PRODUCTS COMPANY
Since 1928 Growers and Processors of Citrus Products

Distributed by

MUTUAL CITRUS PRODUCTS CO.
424 South Atchison Street, Anaheim, Calif.

R. D. WEBB & CO., INC.
137 Boston Post Road, Cos Cob, Conn.

Lithium stearate, dms., c.l., works, lb. .47½ - —
dms., ton lots, works lb. .48½ - —
dms., less-ton lots, works lb. .53½ - —
Lithium sulfate, dms., 100-lb. lots, lb 1.15 - 1.25
Lithium titanate, dms., works lb. 1.15 - 1.25
Lithol red toner, barium, bbls., works lb .98 - —
Lithol-rubine red toner, pure bbls., works lb 1.50 - —
Resinated, bbls., works lb 1.47 - —
Lithopone, ord, bgs., c.l., dlvd E, lb .08⅜ - —
bgs, l.c.l., dlvd E lb .09⅛ - —
Titanated (high-strength), bgs., c.l., dlvd lb. .11 - —
bgs, l.c.l., dlvd lb 12 - —
Lobelia herb, bls lb .55 - —
Lobeline sulfate, bots, 50-oz. lots, works oz. 30.00 - —
Locust bean gum, powd, bgs lb .38 - .40
Lycopodium, cs. lb. 3.25 - 3.50
l-Lysine monohydrochloride, 25-lb. dms lb 4.95 - —

M

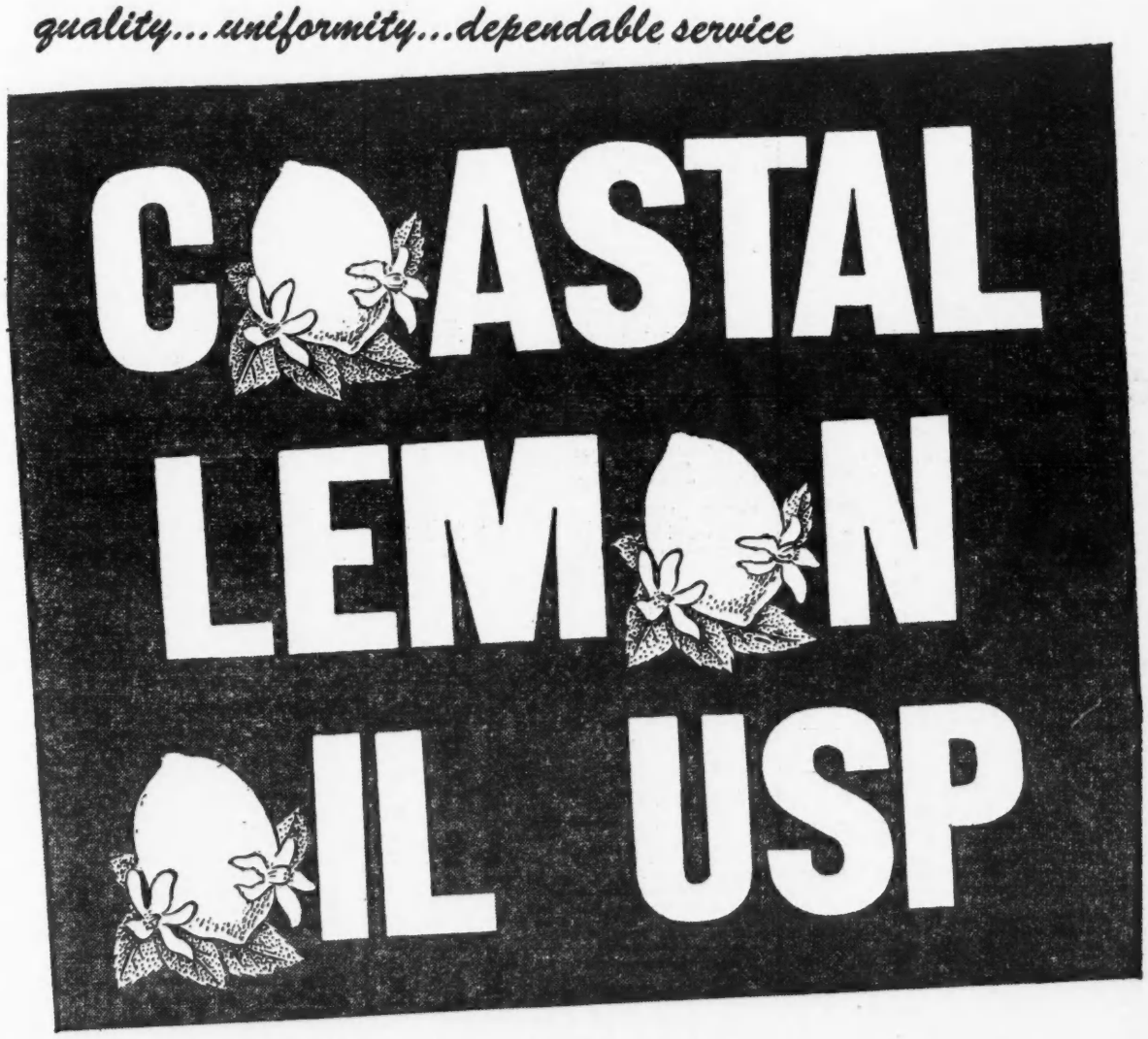
Mace, Siauw, No. 1, bls. lb. 1.90 - —
No. 2, whole, bls lb 1.65 - —
siftings, bls. lb. 1.60 - —
Mace oil, dist, cns, dms lb 9.75 - 12.25
Magnesia, calcined, tech, bgs., cns., frt equald lb. .25¾ - .26½
Tech, syn, rubber grade, light, bgs., c.l. frt equald lb. .28¾ - .30
rubber grade, extra light, bgs., c.l. frt equald lb. .28 - —
bgs, l.c.l., frt equald lb .28¾ - —
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points
Magnesia, calcined, tech., heavy, 85% bgs., c.l. f.o.b. Luning, Nev ton. 39.50 - —
91% bgs, c.l. same basis, ton. 49.50 - —
95%, bgs., c.l., same basis, ton. 59.00 - —
USP, light, bgs. lb. .36½ - .37½
USP, heavy, bgs. lb. .36½ - .37½
Magnesite, chemical grade, calcined, powd, bgs, c.l., works frt equald ton 86.25 - —
Chemical grade, deadburnt, standard grain, bulk, c.l., Chewelah, Wash. ton. 46.00 - —
Magnesium bromide, cs, tars lb .95 - 1.00
Magnesium carbonate, tech., bgs., c.l., frt equald lb. .11 - —
bgs, t.l., frt equald lb. .11½ - —
bgs, l.c.l, frt equald lb. .13½ - .14
USP, bgs., c.l., frt. equald lb. .13½ - —
bgs, t.l., frt, equald lb. .14 - —
bgs., l.c.l, frt equald lb. .15 - .16
Above prices are quoted f.o.b. works, freight equald, with Metropolitan New York and competitive producing points
Magnesium chloride, anhyd., 92%, flake or pebble, dms, c.l., works lb. .12¼ - —
dms, l.c.l., works lb. .14 - .15
Hydrous, 99%, flake, bgs., c.l., works ton. 55.00 - —
bgs, l.c.l., works ton 65.00 - 80.00
Magnesium gluconate, 100-lb. dm., f.o.b. works E lb. 1.42 - —
Magnesium hydroxide, NF, powd., dms., 500 lbs or more, f.o.b., works lb. .24½ - .25½
Magnesium lauryl sulfate, dms., c.l., frt. alld lb. .22½ - —
dms., l.t.l., frt. alld lb. .23½ - —
tanks, frt. alld lb. .21½ - —
Magnesium metal, 99.8%, ingots, 10,000-lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼ - —
sticks, cs. works frt alld. on carlots lb. .59 - —
Magnesium nitrate, cryst., dms., works lb. .23 - —
Magnesium oxide (see Magnesia, calcined).
Magnesium phosphate tribasic, NF, bbls lb. .75 - —
Magnesium silicate (see Talc)
Magnesium silicofluoride, dms., works lb. .10½ - .12
Magnesium sulfate, tech., bgs., c.l., works 100 lbs. 2.15 - —
bgs., l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l. works, 100 lbs. 2.35 - —
bgs, l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
bgs, smaller lots 100 lbs. 3.35 - —
Magnesium trisilicate, USP, fib. dms., 5,000-lb. lots lb. .38 - —
fib. dms., 1,000-lb. lots lb. .40 - —
fib. dms., 100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisicilate 7c. per lb. higher.
Malachite green, straight, PTMA, bbls. works lb. 5.30 - —
Malathion, dms., c.l., works lb. .89 - —
dms., l.c.l., works lb. .92 - 1.01
Maleic acid, cryst, powd., dms lb. .37¼ - —
Maleic anhydride, dms., c.l., dlvd, E of Rockies lb. .28¾ - —
dms., l.c.l., dlvd E of Rockies lb. .29¾ - —
tanks, dlvd E of Rockies lb. .27¾ - —
Prices on maleic anhydride W. of Rockies, 1½c. per lb. higher
Malic acid, tech., dms. lb. .50 - —
Mandelic acid, NF, dms., 1,000-lb. lots lb. 2.35 - —
dms., smaller lots lb. 2.40 - 2.50
Mandrake root, bls. lb. .40 - —
Manganese acetate, dms., dlvd lb. .35 - —
Manganese borate, tech., fib. dms. lb. .23½ - —
Manganese carbonate, chemical grade, 46% Mn, bgs., 20,000-lb. lots and more, works lb. .11 - .16
Manganese chloride, Cl², anhyd., dms., 20,000-lb. lots, works lb. .21¾ - —
smaller lots, works lb. .23½ - —
Manganese dioxide, African, 83-87%, 40,000 to 99,999-lb. lots, burlap paper lined bgs., gross for net works ton. 148.00 - —
40,000 to 99,999-lb. lots, paper bgs., same basis ton 144.50 - —
40,000 to 99,999-lb. lots, dms. same basis ton. 152.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots, $3 per ton higher.
Manganese gluconate, dms. lb. 1.84 - —
Manganese hydrate, dms., dlvd lb. .35 - —
Manganese hypophosphite, NF, dms. lb. 3.52 - —
Manganese linoleate, liq., 4.35% Mn, dms lb .35¼ - —
Solid, precip., 8.2% Mn, bbls lb. .41¼ - —

Manganese metal, electrolytic, dms., c.l., dlvd. E. lb. .34 - —
dms., ton lots, dlvd E. lb. .36 - —
dms., smaller lots, dlvd. E. lb. .38 - —
Manganese naphthenate, liq., 6% Mn, dms., frt. alld lb. .29¾ - —
Manganese resinate, fused, 3½% Mn, dms lb. .25¼ - —
Precip., 6½ 7% Mn, dms lb. .33 - —
Manganese sulfate, fertilizer grade, 65% $MnSO_4$, bgs., c.l., dlvd S E. ton. 97.50 - —
bgs., l.c.l., dlvd S. E. ton. 104.50 - —
Manganese tallate, 6%, dms. lb. .26 - —
Manila copal gum, C, bgs. lb. .35 - .39
DBB, bgs. lb. .25 - .28
DK, bgs. lb. No stocks.
DK, dust bgs. lb. .14 Nom.
MA, soft, bgs. lb. .20 - .24
WS, bgs lb. No stocks.
Mannitol com'l fib dms., ton lots, works lb. .60 - —
fib dms. to ton lots, works lb. .62 - —
fib dms., single dm., works lb. .65 - —
Marine pitch, dms. (b. .04¼ - .05
MBTS (see Mercaptobenzothiazyl disulfide)
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .27½ - —
bgs., l.c.l., works lb. .29 - —
Menadione USP bots. gram. .044 - .05
Menhaden oil, crude, tanks, works, Atl. & Gulf lb. .07 - —
Menthol, nat., USP, Brazilian cs. lb. 6.30 - 6.75
Japanese, cs. lb. 7.50 - 8.00
Syn., USP racemic cns lb 4.50 - —
2-Mercaptobenzothiazole, bgs., fib. dms., ton lots, works, frt. alld lb. .44 - —
bgs, fib dms, less ton lots, same basis lb. .46 - —

Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton lots, works, frt. alld. lb. .34 - —
bgs, fib. dms., less ton lots, same basis lb. .36 - —
Mercuric chloride, NF, cryst., dms., 50-lb lots or more lb. 4.98 - —
USP, gran. or powd., 50-lb. dm., 100 lbs., f.o.b. works lb. 4.78 - —
Mercuric cyanide, NF VIII, powd., fib. dms lb. 6.84 - —
Mercuric iodide red, NF, 100-lb. dm., f.o.b. works lb. 7.72 - —
Mercuric oxide, red., NF IX, 50-lb. dm., 100 lbs., f.o.b. works lb. 5.97 - —
tech., 50-lb. dm., 100 lbs., same basis lb. 5.77 - —
Mercuric oxide, yellow, NF, 50-lb. dm., 100 lbs., same basis lb. 6.14 - —
tech., bbls. 1,000-lb. lots lb 5.58 - —
bbls. smaller lots lb. 5.60 - —
Mercurous chloride (see Calomel).
Mercurous iodide, yellow, NF, 100-lb. net-flask. 224.00 - 227.00
Mercury, ammoniated (see White precipitate, USP XV).
Mercury metal, 76 lbs. per flask. net-flask. 215.00 - 217.00
Mesityl oxide, dms., c.l., dlvd lb. .15 - —
dms., l.c.l., dlvd. lb. .16½ - —
tanks, dlvd. lb. .12½ - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanilic acid, dms., works lb. .57 - .75

Metanitroparatoluidine (see m-Nitro-toluidine).
Metanitroaniline (see m-Nitroaniline).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methacrylic acid, glacial, 98%, dms., truckloads, frt. equald lb. .42½ - —
dms., smaller lots, frt. equald. lb. .43 - .73
tanks, works, frt. equald lb. .40 - —
Methanol, nat., denaturing grade, tanks, frt. alld gal. .85 - —
Syn., zone 1, dms., c.l. or t.l. min., dlvd gal. .51½ —
dms., l.c.l., dlvd gal. .61½ —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .35 - —
tankwagon, 4,000 gal. min., dlvd gal. .30 - —
tankwagon, 4,000 gal. min., f.o.b. terminal gal. .29 - —
Syn., zone 2, dms., c.l., or t.l., min., frt. alld. or dvld gal. .55½ - —
dms., l.c.l., works gal. .65½ - —
tankwagon, 2,000-4,000 gal. lots, min., dlvd., Metropolitan area gal. .39 - —
tanks, 4,000 gal. min. dlvd. gal. .34 - —
Synthetic methanol zones are: Zone 1 is all continental US E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of US west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.

quality... uniformity... dependable service



PURE California cold pressed lemon oil produced under continuous scientific quality control . . . bulk blended for uniformity, from desert and coastal grown lemons . . . packaged in tamper-proof containers for your protection . . . and priced to save you money. Our research and laboratory facilities have helped many users with product improvement and cost reduction...perhaps we can help you.

VENTURA PROCESSORS, Ventura, California

DISTRIBUTED BY:

International Flavors & Fragrances, Incorporated
417 Rosehill Place, Elizabeth 2, New Jersey

Ventura Processors, 2325 Vista Del Mar Drive, Ventura, California

Methapyrilene fumarate, 100-999 lbs., dms., f.o.b. works, frt. equald lb. 21 75 - —
Methapyrilene hydrochloride, 100-999 lbs., dms., f.o.b. works, frt equald lb. 27.25 - —
Methenamine (see Hexamethylenetetramine).
Methionine hydroxyanalogue, (calcium salt) 90% min., dms., t.l., frt. alld. lb. 1.10 - —
dms., l.t.l., same basis lb. 1.16 - —
dl-Methionine, tin dms., frt. alld., 50-lb or more lb. 3.50 - —
Feed grade 98%, fib. dms., same basis lb 1.55 - —
Methyoxychlor, 50% wettable powder, dealers, dms., cs. lb. .66 - —
Methyl abietate non-ret dms., c.l., dlvd zone 1 lb. .21½- —
non-ret dms. t.c.l. same basis lb .22 - .22½
Methyl abietate, hydrogenated, non-ret dms., c.l., dlvd zone 1 lb. .23½- —
non-ret dms., t.c.l., same basis, lb. .24 - .24½

Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio., Ky., Mich., Ind., Ill., Wis., St Paul and Minneapolis, Minn; St Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn

Methyl acetone, nat., dms., t.c.l., E of Miss., frt alld gal. .62½- —
Syn., dms., c.l., frt. alld E gal. .66 - —
dms., t.c.l., frt alld E. gal. .76 - —
tanks, frt. alld E gal. .51 - —

Synthetic methyl acetone E. territory comprises all states East of and including Colo., Mont., N. Mex. and Wyo. West territory is made up of all states west of those four.

Methyl acrylate dms., c.l., t.l., dlvd. lb. .39 - —
dms., t.t.l., dlvd. lb. .40 - —
tanks, dlvd lb. .37 - —
Methyl alcohol (see Methanol).
Methyl amyl acetate, dms., c.l., dlvd E lb. .17 - —
dms., t.c.l., dlvd E. lb. .18½- —
tanks, dlvd E. lb. .14½- —
Methyl amyl alcohol, dms., c.l., dlvd. lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd lb. 14½- —
Methyl amyl ketone, dms. works lb. 1.05 - —
N-Methylaniline tech. tanks, frt alld lb. .60 - —
Methylanthranilate, cns lb. 2.20 - 2.75
Methyl benzoate cns., dms. lb. .60 - .75
Methyl bromide, service organization prices, 40 to 375-lb. cyls., large lots, frt. alld lb. .62 - .66
Methyl cellulose, special vis., (1,500-4,000 cps.) 50-lb bgs., c.l., works lb. .82 - —
50-lb. bgs., 2,000-lb lots and more, same basis lb. .89 - —
50-lb bgs., smaller lots, frt. alld on 100 lbs lb. 1.05 - —
Standard vis, (15,400 cps.) 50-lb. bgs., c.l., frt. alld lb. .69 - —
50-lb bgs., 2,000-lb. lots and more, same basis lb. .76 - —
50-lb bgs. smaller lots, frt. alld, on 100-lbs lb. .79 - .86
Methyl chloride, indust., cyls., frt. equald lb. .22¼- —
tanks, multi-unit, same basis, lb. .16¼- —
tanks, single unit, same basis, lb. .12¾- —
Methyl chloride, refrigerator mfrs. cyls., dlvd. lb. .48¾- —
other consumers or service men, cyls., dlvd lb. .67¾- —
Methyl chloroform (see 1,1,1-Trichloroethane).
Methyl cinnamate, cns. lb 1.55 - 1.80
Methyl ethyl ketone, dms., c.l., dlvd lb. .15 - —
dms., t.c.l., dlvd lb. .16½- —
tanks, dlvd. lb. .12½- —
2-Methyl-5-ethyl pyridine, dms., c.l., works lb. .45 - —
dms., t.c.l., works lb. .45¾- —
tanks, works lb. .43 - —
Methyl formate, refd., dms. lb. .35 - .40
Tech., non-ret. dms., any quantity works lb. .10 - —
tanks, works lb. .07 - —
a-D Methyl glucoside, tech., 100-lb. multiwall paper bgs., c.l., works lb. .21 - —
100-lb. multiwall paper bgs., t.l., min. 23,000 lbs., works lb. .21½- —
100-lb. multiwall paper bgs., l.t.l., works lb. .23 - —
Methyl heptin carbonate, bots lb. 28.00 - 31.00
Methyl p-hydroxybenzoate, fib. dms. lb. 1.90 - 2.00
Methyl ionone, standard, cns., dms. lb. 3.40 - 3.85
Methyl isobutyl carbinol (see Methyl amyl alcohol).
Methyl isobutyl ketone, dms., c.l., dlvd lb. .17 - —
dms., t.c.l., dlvd. lb. .18½- —
tanks, dlvd. lb. .14½- —
Methyl methacrylate, dms., c.l., t.l., frt. equald. with Belle, W. Va. lb. .31 - —
dms., smaller lots, same basis lb. .31½- —
tanks, same basis lb. .29 - —
Methyl naphthyl ketone, cryst., cns lb 2.45 - 4.30
Methyl parahydroxybenzoate (see Methyl p-Hydroxybenzoate).
Methyl parathion tech. 80% dms., frt. alld. E. lb. .84 - —

Methyl parathion prices 2c. per lb. higher in West.

Methyl roseaniline chloride, NF., 5-lb fib. dms. lb. 6.90 - —
Methyl salicylate, dms., t.l., frt. alld lb. .60¼- —
dms., t.c.l., same basis lb. .62½- .67½
Methyl testosterone USP, 100-gram bots gram. No Prices.
Methyl violet toner, molybdated, PMA, bbls., dlvd. E. of Rockies lb. 2.80 - —
Tungstated, PTMA, bbls., same basis lb. 4.35 - —

Methyl violet prices 1c. higher W. of Rockies.

Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - —
Methylene chloride, tech., straight or assorted, dms., c.l., or t.l., dlvd lb. .13½- —
dms., t.c.l., t.t.l., dlvd lb. .15¾- —
Tech., tanks, 4,000-gal. min., dlvd. lb. .12¼- —
tanktrucks, 1,000-gal. min., dlvd. lb. .13¼- —
b-Methylnaphthalene, 32°C., m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry-grd., paint, plastic, 100 mesh, bgs. c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
Mica, wet-grd., biotite bgs., c.l., works, frt. alld. E lb. .06½- —
bgs. t.c.l. ex whse. lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works frt. alld E. lb. .08¼- —
bgs., t.c.l., ex-whse. or freight alld. E lb. .09 - —
rubber bgs., c.l., works, frt. alld. E lb. .08 - —
bgs., t.c.l., ex-whse or frt. alld. E lb. .08¾- —
wallpaper bgs. c.l. works, frt. alld E lb. .08¾- —
bgs., ex-whse. or frt. alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
Mica, wet-grd. W. of Miss. ½c higher; W. of Rockies 1c. higher.
Microcrystalline wax, petroleum, coating grades, tankcars, works lb. .10 - .11
laminating grades, tankcars, works lb. .11 - .12
Mineral black, bgs., works lb. .0160- .0673
Mineral oil, white, tech., 50-65 vis., non-ret. dms., c.l., f.o.b. refy gal. .62 - —
non-ret. dms., t.c.l., same basis gal. .67 - —
tankcars, refy gal. .48 - —
65-75 vis., non-ret. dms., c.l., same basis gal. .62 - —
tankcars, refy. gal. .46 - —
80-90 vis., non-ret. dms., c.l., same basis gal. .63 - —
non-ret. dms., t.c.l., same basis gal. .68 - —
tankcars, refy. gal. .47 - —
135-138 vis., non-ret. dms. c.l., same basis gal. .69 - —
non-ret. dms., t.c.l., same basis gal. .74 - —
tankcars, refy. gal. .53 - —
145-155 vis., non-ret. dms. c.l., same basis gal. .75 - —
non-ret. dms., t.c.l., same basis gal. .80 - —
tankcars, refy gal. .59 - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .77 - —
non-ret. dms., t.c.l., same basis gal. .82 - —
tankcars, refy gal. .61 - —
USP, 200-210 vis., non-ret. dms., c.l., f.o.b. New York gal. .34 - —
non-ret. dms., t.c.l., same basis gal. .89 - —
tankcars, refy gal. .63 - —
USP, 300-350 vis., non-ret. dms., c.l., f.o.b. New York gal. .84½- —
non-ret. dms., t.c.l., same basis gal. .89½- —
tankcars, refy gal. .68½- —
Mineral orange, American, bbls., c.l., works lb. .16 - —
bbls., t.c.l., same basis lb. .17 - —
Mineral spirits, petroleum, odorless, tankcars, New Jersey gal. .29 - —
New York gal. .305 - —
Houston, Texas gal. .25 - —
Regular, tankcars, New Jersey and New York gal. .18 - —
Group 3 gal. .12875- —
Houston, Texas gal. .145 - —
Mink oil, dms lb. 2.75 - —
Mirbane oil (see Nitrobenzene)
MNPT maroon toner, kgs., c.l., works lb. 6.30 - —
Molasses, blackstrap, feed grade, tanks, New Orleans gal. .09¾- .10
tanks, New York gal. .14½- .16
Molybdated orange, bbls. lb. .a3 - —
Molybdenum metal, powd., 80 or 200 mesh, ctns., works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Molybdenum trioxide, purif., dms., works lb. 1.15 - —
Tech., chemical, dms. works, basis Mo. content lb. 1.48 - —
Tech., metallurgical, dms., works, basis Mo. content lb. 1.47 - —
Molybdic acid, 85%, dms., works. lb. 1.05 - 1.15
Monoallylamine, dms., c.l., dlvd lb. .965 - —
dms., c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —
Monobutylamine, dms., c.l., dlvd. E. of Rockies lb. .57½- —
dms., t.c.l., same basis lb. .59 - —
tanks, same basis lb. .55 - —
Mono-tert-butyl-m-cresol, dms., c.l., works lb. .55 - —
dms., t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Monochloracetic acid, purif. (see Chloroacetic acid, mono).
Monochlorobenzene, dms., c.l., frt. alld or dlvd. E lb. .10½- —
dms., t.c.l., same basis lb. .11½- —
tanks, same basis lb. .08¾- —
Monoethanolamine, dms., c.l. dlvd. E lb. .27½- —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine).
Monoethylamine, 70% aqueous, solution, dms., c.l., dlvd. E. 100% basis lb. .38½- —
dms., t.c.l., dlvd. E. 100% basis, lb. .40 - —
tanks, dlvd. E., 100% basis lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidine (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd E lb. .27½- —
dms., t.c.l., same basis lb. .29 - —
tanks, same basis lb. .25 - —
Monoisopropylamine, anhyd., dms., c.l., dlvd lb. .33½- —
dms., t.c.l., same basis lb. .35 - —
tanks, same basis lb. .31 - —
Monomethylamine, anhyd., cyls., t.c.l., frt. equald., 100% basis lb. .30 - —
tanks, 100% basis lb. .26 - —
30-35% soln., dms., c.l., frt. equald., 100% basis lb. .36 - —
dms., t.c.l., frt. equald., 100% basis lb. .36½- —
tanks, frt. equald., 100% basis, lb. .26 - —
40% soln., dms., frt. equald., 100% basis lb. .33 - —
dms., t.c.l., frt. equald., 100% basis lb. .33½- —
tanks, frt. equald, 100% basis lb. .26 - —
Monopentaerythritol, tech., bgs., c.l., dlvd. E lb. .31 - —
bgs., t.c.l., dlvd. E lb. .32 - —
Monopotassium glutamate dms., 1,000-lb. lots, frt. alld lb. 3.05 - —
dms, 100-lb lots, same basis lb. 3.25 - —
Monosodium glutamate, dms., 100 lbs., dlvd. lb. 1.00 - 1.15
Monosodium phosphate (see sodium phosphate, monobasic).
Montan wax, Calif., refd., bgs. lb. .27 - .28
Imp., crude, Bohemian, bgs. lb. .22 - .24
German, bgs. lb. .26 - .27
Morphine, cns. oz. 12.40 - 12.60
Morphine acetate, anhyd., cns. oz. 9.95 - 10.00
Morphine hydrobromide, cns. oz. 9.90 - 9.95
Morphine hydrochloride, NF, cns oz. 9.90 - 9.95
Morphine sulfate, USP, cns. oz. 9.90 - 10.05
Morpholine, dms., c.l., dlvd. E lb. .55¼- —
dms., t.c.l., dlvd. E. lb. .56¼- —
tanks, dlvd. E. lb. .52¾- —
Muriatic acid (see Hydrochloric acid).
Musk, syn., ambrette, fib. dms., 100-lb. lots lb. 4.40 - 4.90
cns., 25-lb. lots lb. 4.50 - 5.00
Ketone, fib. dms., 100-lb. lots lb. 4.60 - 5.10
cns., 25-lb. lots lb. 4.70 - 5.20
Xylol, fib. dms., 100-lb. lots lb. 1.26 - —
cns., 25-lb. lots lb. 1.40 - —
Mustard seed, Danish, yellow, bags, lb. .11½- —
Montana, yellow, bgs lb. .10½- —
Oriental, bgs. lb. .08 - —
Mustard oil, syn. bots. lb. 1.60 - 1.85
Myristic acid, bgs lb. .31 - .33
tanks lb. .30½- .32
Myrrh gum, cs lb. .55 - —

N

Naphtha, high solvency (see Solvent naphtha, petroleum).
Naphtha, petroleum, cleaner's (see Cleaner's naphtha).
Naphtha, VM&P, petroleum, tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Naphthalene, crude, com., 74°, tanks, frt. equald lb. .04¼- —
78°, tanks, same basis lb. .05 - —
imp., 78°, bgs., large lots lb. .09½ Nom.
Refd., indust., chipped, crushed, bgs., frt. equald lb. .12½- —
tanks, same basis lb. .09¾- —
Refd., indust., balls, flakes, wholesalers, jobbers, bbls., c.l., same basis lb. .15½- —
cs., 50 lbs., c.l., same basis, lb. .15¾- —
1-lb. pkgs., c.l., same basis, lb. .18½- —
a-Naphthol, dms., frt. alld. lb. 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
bbls., t.c.l., works lb. .35 - —
Naphthol, ITR, red toner, bbls., works lb. 5.50 - —
1-Naphthol-3,6-disulfonic 8-amino acid (see H acid).
1-Naphthol-4 sulfonic acid (see Nevile and Winther's acid).
1-Naphthol-5-sulfonic acid (see L acid).
1-Naphthol-5-sulfonic 8-amino acid (see S acid).
2-Naphthol-6,8-disulfonic acid (see Gamma acid).
Naphthol sulfonic mixed acid (see Cleve's acid).
a-Naphthylamine, dms., frt. alld lb. .50 - —
b-Naphthylamine, tech. flake, bbls., works lb. 1.60 - —
1-Naphthylamine-5-sulfonic acid (see Laurent's acid).
2-Naphthylamine-4,8-disulfonic acid (see Cassella acid),
2-Naphthylamine-1-sulfonic acid (see Tobias acid).
2-Naphthylamine-6-sulfonic acid (see Broenner's acid).
1-Naphthylamine-7-sulfonic acid (see F acid)
Naringin, fib. dms lb. 8.50 - -
Neatsfoot oil, 15° cold test, dms. lb. .30 Nom.
20° cold test, dms lb. .29 Nom.
30° cold test, dms lb. .28 Nom.
Neocinchophen, USP, dms., frt. adjusted lb. 7.00 - 8.00
Neomycin sulfate, fib. dms., 1-kilo basis activity gram. .25 - —
fib. dms., 100-999-gram lots, basis activity gram. .30 - —
Tech., fib. dms gram. .13½- —
Neroli oil, NF, French, bots. lb. 425.00 - 575.00
Tunisian, bots. lb. 400.00 - —
Nerolin, cns. lb. 2.45 - 2.85
Neville and Winther's acid, dms., frt. alld lb. 1.30 - —
Niacinamide (see Nicotinamide).
Nickel acetate, bbls., dlvd lb. .68½- .75½
Nickel carbonate, bbls., dlvd lb. .78¼- .85¼
Nickel chloride, bbls., dlvd lb. .37 - .45
Nickel formate, bbls., ton lots, frt. alld lb. .72 - .73
Nickel metal, electro cathodes, cs., works lb. .74 - —
Nickel nitrate, dms., frt. alld lb. .31½- .33½
Nickel oxide, black, bbls lb. .85 - —
Green, bbls. lb. .84 - —
Nickel sulfate, bgs., c.l., dlvd lb. .28 - —
bgs., t.c.l., dlvd lb. .28½- .36
Nicotinamide, USP 50-kilo dm., frt. adjusted kilo. 8.00 - —
Nicotinamide hydrochloride, dms., frt. adjusted kilo. 8.00 - —
Nicotine sulfate, 40% dealers, 50-lb. dms, frt. alld lb. 1.20 - —
40%, manufacturers, 500-lb. dms., frt. alld lb 1.05 - —
Nicotinic acid, USP, dms. dlvd kilo 6.00 - —
Nicotinic amide, USP (see Nicotinamide).
Niger seed, bgs lb. .10¼- —
Nikethamide, cbys. lb. 5.00 - —
Nitric acid, 36° Be., cbys., c.l., works E. 100 lbs. 5.75 - —
cbys., t.c.l., works E 100 lbs. 6.05 - 6.85
38° Be., cbys., c.l., works E. 100 lbs. 6.25 - —
cbys., t.c.l., works E. 100 lbs. 6.55 - 7.35
40° Be., cbys., c.l., works, E. 100 lbs. 6.75 - —
cbys., t.c.l., works, E. 100 lbs. 7.05 - 7.85
42° Be., cbys., c.l., works, E. 100 lbs. 7.25 - —
cbys., t.c.l. works, E... 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
cbys. extra, t.c.l., works. lb. .20 - —
5-pint bots., extra, cs., c.l., same basis lb. .22½- —
5-pint bots. extra cs., t.c.l., same basis lb. .24 - .25
4-Nitro-2-aminophenol, tech., paste, dms., frt. alld lb. .90 - —
m-Nitroaniline, cryst., dms., frt. alld. lb. 1.15 - —
Paste, dms., frt. alld., 100% basis, lb. 1.10 - —
o-Nitroaniline, flaked, dms., t.l., frt. alld. lb. .49 - —
dms., l.t.l., frt. alld lb. .51 - —
o-Nitroaniline orange toner, kegs, lb. 1.35 - —
p-Nitroaniline, dms. frt. alld lb. .445 - —
o-Nitroanisole, tech., tanks, frt. alld. lb. .36 - —
p-Nitroanisole, tech., solid, dms., frt. alld lb. .72 - —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld. lb. .13 - —
dms., t.c.l., frt. alld. lb. .14 - —
tanks, frt. alld. lb. .11 - —
p-Nitrobenzoic acid, dms., c.l., works lb. .63 - —
dms., t.c.l., works lb. .64 - —
Nitrocellulose, ester-soluble, 30-35 cps., ¼, ½, ¾, 5-6, 15-20, 30-40, 60-80, 125-175 seconds, bbls., c.l., works lb. .37½- —
bbls., t.c.l., same basis lb. .33½- .40½
18-20, cps., bbls., c.l., same basis lb. .39½- —
bbls., t.c.l., same basis lb. .40½- .42½
250-400, 600-1,000 seconds, bbls., t.c.l., same basis lb. .43 - .46
Spirit soluble, 30-35 cps., ¼, ½ seconds, bbls, c.l., same basis lb. .43 - —
bbls., t.c.l., same basis lb. .44 - .46
5-6 cps., 40-60 seconds, bbls., c.l., same basis lb. .42 - —
bbls., t.c.l. same basis lb. .43 - .45

Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable.

o-Nitrochlorobenzene, dms. c.l., frt. alld lb. .15 - —
dms., t.c.l., same basis lb. .16 - —
tanks, same basis lb. .13 - —
p-Nitrochlorobenzene, dms. lb. .26 - .27
2-Nitro-p-cresol, tech., dms., dlvd. lb. .88 - —
Nitroethane, dms., c.l., dlvd. E lb. .25 - —
dms., t.c.l., dlvd E lb. .26½- —
tanks, dlvd E lb. .22½- —

Nitroethane prices West of Rockies are 1c. higher.

Nitrogen solutions, tanks, frt. equald., N unit. 1.24 - —
Nitrogenous process tankage, bulk, works unit-ton. 4.50 Nom.
Nitrogenous sewage sludge, bulk, f.o.b. Chicago, works unit-ton 3.10 - .50
Nitromethane, dms. t.l., dlvd. E lb. .25 - —
dms., l.t.l., dlvd E lb. .26½- —

Nitromethane prices West of Rockies are 1c. higher.

a-Nitronaphthalene, bbls., frt. alld. lb. .31 - —
o-Nitrophenol, dms., works, frt. equald lb. .84 - —
p-Nitrophenol, dms., c.l., frt. alld. lb. .45 - —
dms., t.c.l., frt. alld lb. .47 - —
1-Nitropropane, dms., c.l., frt. alld. E. of Rockies lb. .23½- —
dms., t.c.l., same basis lb. .25 - —
tanks, same basis lb. .21 - —
2-Nitropropane dms., c.l., frt. alld. E. of Rockies lb. .18½- —
dms., t.c.l., same basis lb. .20 - —
tanks, same basis lb. .16 - —

Nitropropane prices West of Rockies are 1c. per lb. higher.

m-Nitrotoluene, tech., dms. frt. alld. lb. .45 - —
o-Nitrotoluene dms., c.l., frt. alld. lb. .15 - —
dms., t.c.l., frt. alld. lb. .16 - —
tanks, frt. alld. lb. .13 - —
p-Nitrotoluene, tech., cast, dms., c.l., works lb. .27½- —
dms., t.c.l., works lb. .28 - —
flake, dms., c.l., t.l., works lb. .27½- —
dms., t.c.l., works lz. .28 - —
m-Nitro-p-toluidine, dms. lb. 1.25 - —
Nonylphenol, dms., c.l., frt. alld. lb. .22 - —
dms., t.c.l., frt. alld lb. .23 - —
tanks, frt. alld lb. .19½- —

Nonylphenol prices on shipments to Western States are 2c. higher.

Nutmegs, East Indian, whole, bgs. lb. 1.36 - —
West Indian, bgs lb. 1.45 - —
Nutmeg oil, USP, dist., East Indian, cns lb. 9.50 - 12.75
West Indian, cns lb. 9.50 - 12.75
Nux vomica, bls lb. .20 - —
Powd., bbls., bxs lb. .20 - .22

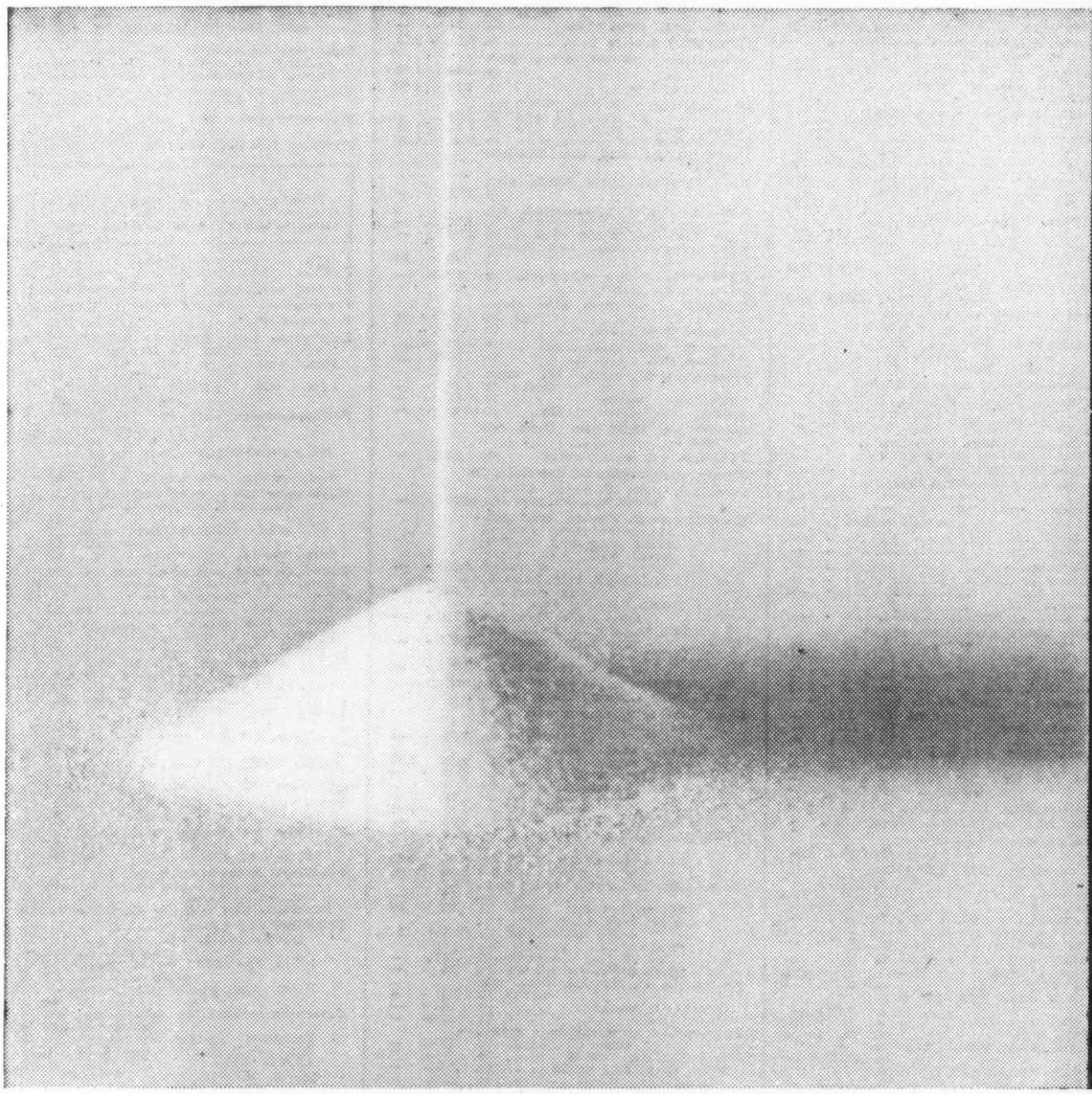
O

Ocher (see Iron oxide yellow, nat.).
Ocotea cymbarum oil, dms lb. .48 - .55
Octane, indust., tanks, Bayonne, N.J gal. .20 - —
Borger, Tex. gal. .15¾- —
1-Octanol, tech., dms., c.l., dlvd., Zone 1 lb. .43½- —
dms., t.c.l., dlvd. Zone 1 lb. .45½- —
tanks, dlvd., Zone 1 lb. .41 - —
Octyl alcohol, perfumers' grade, bots lb. 1.60 - 3.25
Octyl alcohol, tech, (see 1-Octanol, tech).
Octyl phenol, bgs., c.l., works lb. .22 - —
bgs., t.c.l., works lb. .22½- —
tanks, works lb. .21 - —
Octyl phenol in dms. 11c. higher.

OILS

Oil quotations are listed individually. For example, prices on Oil, coconut, may be found in the C's under Coconut oil.

Oiticica oil, liq., dms. lb. .22 - .22½
tanks lb. .20½- —
Oleic acid, dbl.-dist. (white), dms. lb. .18 - .20¼
tanks lb. .15½- —
S. d., dms. lb. .16¾- .19½
tanks lb. .14¼- —
Oleo oil, extra, dms lb. .14½- .15
Oleostearine, dms. lb. .12½- .13
Oleum (see Sulfuric acid, fuming).
Olibanum gum siftings, cs. lb. .13 - .20
Tears, cs. lb. .22 - .30
Olibanum oil, bots. lb 5.00 - 7.65
Extra fine, bots lb 8.00 - 9.50
Olive oil, edible, dms. spot, duty-paid gal. 2.25 - 2.35



FROM
CYANAMID'S
CUSTOMER
CASEBOOK

PROBLEM

FIND A SUPERIOR GRADE NEOMYCIN SULFATE FOR EASIER TABLET COMPRESSION

ANSWER

Granular Grade Neomycin, developed by American Cyanamid. Prepared by a special technique, this free-flowing neomycin sulfate can be compressed easily into tablets without the addition of a lubricant or diluent. It is another example of how Cyanamid reduces your production costs by offering specific neomycin grades for specific applications.

LET CYANAMID SKILL AND EXPERIENCE GUIDE YOU IN THE PRODUCTION OF ANTIBIOTICS...SULFONAMIDES...VITAMIN SUPPLEMENTS

CYANAMID

AMERICAN CYANAMID COMPANY. FINE CHEMICALS DEPARTMENT.
30 ROCKEFELLER PLAZA. NEW YORK 20, N. Y.

Olivine crude works ton 12.00 - —
20 mesh works ton 15.00 - —
100 mesh works ton 20.00 - —
Opium USP cns oz. 19.20 - 19.45
gran., cns. oz. 21.65 - 21.90
powd cns oz. 21.65 - 21.90
Orange oil expressed USP Brazilian cns. dms lb No stocks.
California cns. dms lb .85 - .90
Florida, cns., dms lb. .68 - .90
Messina cns lb 4.25 - 5.00
West Indian bitter cns. dms lb 2.50 - 3.25
Sweet, dist., cns. dms lb .60 - —
Orange peel, bitter, Haitian, bls lb. .14 - .15
Sweet lb. .28 - .30

ORANGE PIGMENTS
Orange pigment quotations are listed individually. For example, prices on Orange, chrome, may be found in the C's under Chrome orange.

Origanum oil, Spanish cns lb 1.80 - 2.30
Orris root Florentine, bls lb 55 - —
powd bbls. bxs lb 65 - —
Verona bls lb 35 - —
powd bbls. bxs lb 45 - —
Orthoanisidine (see o-Anisidine)
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroaniline (see o-Chloroaniline).
Orthochlorobenzoic acid (see o-Chlorobenzoic acid)
Orthochloroparanitroaniline (see 2-Chloro-4-nitroaniline)
Orthochlorophenol (see o-Chlorophenol)
Orthocresol (see o-Cresol)
Orthocresotinic acid (see 2,3-Creosotic acid).
Orthodichlorobenzene (see o-Dichlorobenzene)
Orthonitroaniline (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene)
Orthonitroparachlorophenol (see 2-Nitro-4-Chlorophenol)
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidine (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho tertiary amylphenol (see o-tert-Amylphenol)
Orthotolidine (see o-Tolidine base)
Orthotoluidine (see o-Toluidine)
Orthrain USP bots. gram 3.00 - 4.00
Ouricury wax, crude, bgs lb. .65 - .67
Refd., pure, bgs lb. .73 - .75
Oxalic acid bgs. dms. c.l., works. lb. .18 - .18½
bgs. dms. 10,000-lb lots, works. lb. .18¼ - .18¾
bgs. dms. smaller lots, works. lb. .19¼ - .19¾
8-Oxynaphthoic acid, 6lb dms., 250 lbs or more frt alld. lb 1.14 - 1.17
Oxyquinolin sulfate, cns., 100 lb lots, works, lb 4.75 - 5.00
cns. smaller lots, works lb 4.92 - 5.17

P

Palm oil, clarif., dms lb. .1425- .1535
tanks lb. .1195- —
Palm oil acid, dist., dms lb 15¾ - 19¼
tanks lb 13¾ - 14¼
Palmarosa oil, cns. lb. 3.45 - 3.75
Papain, powd., bots lb. 5.50 - 10.00
Papaverine hydrochloride, nat. or syn. USP cns. 25-oz to 100-oz. lots oz. 5.00 - —
cns., smaller lots oz. 5.05 - 5.20
Papaverine sulfate, nat. or syn., USP, cns., oz. 7.10 - 7.35
Paprika, Bulgarian bgs lb. .34 - .35
Hungarian, bgs. lb. .32 - —
Spanish, bgs. lb. .50 - —
Yugoslavian, bgs. lb. .34 - —
Para-aminobenzoic acid (see p-Aminobenzoic acid)
Parachlorobenzoic acid (see p-Chlorobenzoic acid).
Paramethylphenylcinchonic acid (see Neocinchophen)
Paranitrobenzoic acid (see p-Nitrobenzoic acid).
Paratoluidinemetasulfonic acid (see p-Toluidine m-sulfonic acid).
Para-aminophenol (see p-Aminophenol).
Parachloro-orthonitroaniline (see 4-Chloro-2 nitroaniline)
Para-anisidin (see p-Ansidine).
Parachloraniline (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde)
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol).
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Para toner, red, bbls lb. 1.36 - —
Chlorinated, kgs. lb. 1.35 - —
Paraffin, crude, scale, white, 123°-127°F. ASTM, tanks, refy. lb. .0655- —
Paraffin, fully refd., 122°-124°F, ASTM., tanks, refy lb. .0765- —
125°-127°F, ASTM, tanks, refy. lb. .0765- —
130°-132°F, ASTM, tanks, refy. lb. .0765- —
132°-134°F., ASTM, tanks, refy. lb. .0765- —
135°-137°F., ASTM, tanks, refy. lb. .0765- —
AMP temperatures are an arbitrary 3°F. higher than ASTM.
Paraffin oil, pale, 100-110 vis., at 100°F., tanks, east coast refy. gal. .14 - —
Paraffin wax (see Paraffin).
Paraformaldehyde, 91%, flake, bgs., c.l., frt. alld lb. .10 - —
bgs., l.c.l., frt. alld lb. .12 - .13
91%, powd., bgs., c.l., ex whse. lb. .1715- —
bgs., l.c.l., ex whse lb. .1865- —
USP-X, fib. dms., c.l. lb. .19 - —
fib. dms., 1,000-lb. lots lb. .20 - —
fib. dms., smaller lots lb. .21½- —
Paraldehyde, tech., 98%, 55-gal. dms., t.l., dlvd lb. .14 - —
55-gal. dms., l.c.l., dlvd lb. .15 - —
tanks, dlvd. lb. .11½- —
Paranitroaniline (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene).
Paranitrotoluene (see p-Nitrotoluene.
Paranitrophenol (see p-Nitrophenol).
Paraphenetidine (see p-Phenetidine).
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol).
Para-tertiary-amylphenol (see p-tert-Amylphenol)
Para-tertiary butylphenol (see p-tert-Butylphenol)
Parathion, ethyl, dms., frt. alld. lb. .84 - —
Parathion prices 2c. per lb. higher in West.
Paratoluenesulfonamide (see p-Toluenesulfonamide).
Paris green, dealers, 100 lb. dms., frt. alld lb. .45 - —
Passion flower herb, bls lb. .40 - .45
Patchouli oil, imp., cns lb. 4.80 - 5.25
Peach kernel oil, USP (see Apricot kernel oil)
Peacock blue, fugitive, 100% color strength, 250-lb. bbls., dlvd. E. of Rockies lb. 1.00 - —
Peacock blue price 1c higher W of Rockies.
Peanut meal, 45% old process, bgs., f.o.b., mills ton 69.50 Nom.
Peanut oil, crude, tanks, f.o.b. mills. lb. .12½- —
Refd., dms. lb. .17¾- .18
tanks lb. .15¾- —
Pectin, dom. NF citrus, powd. bbls lb 2.05 - 2.06
Dom., tech., powd., 150 jelly grade, bbls lb. 1.28 - —
Imp., Danish, bbls. ex whse lb. 1.28 - —
Penicillin potassium cryst., bulk, 1,000,000 units. .021 - .025
Penicillin procaine cryst., bulk, 1,000,000 units. .021 - .025
Pennyroyal oil USP imported, cns. lb. 2.25 - 3.10
Pentachlorophenol, bgs. c.l., t.l., works, frt equald lb. .21 - —
bgs., l.c.l., same basis lb. 22½- .29
Pentachlorophenol in dms 1c higher.
Pentaerythritol, tech., bgs., c.l., dlvd lb. .31 - —
bgs., l.c.l., dlvd lb. .32 - —
Pentaerythritol, di-and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks, Tex. refy. gal. .14 - —
Pentobarbital, dms., 100 lbs. or more lb 3.00 - —
Pepper, black, Malabar, bgs lb. .45 - —
Lampong, bgs. lb. .45 - —
Red, Funtuas, bgs lb. .31 - —
Japanese, Hontoka, bgs lb. .34 - —
Santaka, bgs. lb. .31½- —
Sudanese, bgs lb. .36 - —
White, Muntok, bgs lb. .75 - —
Peppermint leaves, dom. USP bls., dms lb. .70 - .75
Imp., USP., bls lb. .85 - —
Peppermint oil, nat., dms lb. 4.00 - 5.00
Redist., USP, dms lb. 4.25 - 5.50
Perchloroethylene dms. c.l. or t.l., dlvd lb. .13½- —
dms., l.c.l., dlvd lb. .15¼- —
tanks, dlvd. lb. .11¾- —
tanktruck, 1,000 gal min dlvd. lb. .12¼- —
Peri acid, dry, bbls. frt. alld lb 1.60 - —
Paste, bbls., frt. alld lb 1.55 - —
Peru balsam, dms lb. 1.25 - 1.80
Persic oil, USP (see Apricot kernel oil).
Petitgrain oil, South American cns., dms lb. 2.45 - 3.20
Petrolatum, cream, dms. c.l., refy. lb. .08125- —
dms., t.c.l., dlvd. lb. .10125- .11375
tanks, refy lb .05875- —
Extra amber, dms., c.l., refy. lb. .07125- —
dms., t.c.l., dlvd. lb. .09125- .10375
tanks, refy lb. .04875- —
Lily white, dms., c.l., refy lb. .08625 - —
dms., t.c.l., dlvd. lb .10625 - .12
tanks, refy lb. .06735 - —
USP, snow white, dms. c.l., refy. lb. .09125- —
dms. t.c.l. dlvd. lb. .11125- .125
tanks, refy lb. .06875- —
USP, soft yellow, dms., c.l., refy. lb. .07125- —
dms., t.c.l., dlvd lb. .095 - .10375
tanks, refy. lb. .04875- —
Petroleum pitch (see Asphalt, petroleum).

PETROLEUM PRODUCTS
Petroleum product quotations are listed individually. For example, prices on Petroleum, mineral spirits, may be found in the M's under Mineral spirits, petroleum.

Petroleum sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
non-ret. dms., t.c.l., works lb. .17½- .19
tanks, works lb. .14½- .17
50-55%, sulfuric content, non-ret. dms., c.l., works lb. .16 - —
non-ret. dms., t.c.l. works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms. c.l., frt. alld. E lb. .91 - —
dms., t.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb 1.05 - —
dms., same basis lb 1.08 - —
Phenobarbitol, USP, dms., 100-lb. lots lb 3.25 - —
Phenobarbital-Sodium (see sodium phenobarbital).
Phenol, 90-92% (cresol 8-10%) non-ret. dms., frt. alld. E of Rockies lb. .16¾- —
non-ret. dms. t.c.l. same basis. lb. .17¾- —
tanks, same basis lb. .14¾- —
82-84% (cresol 16-18%) non-ret, dms., c.l., same basis lb. .16½- —
non ret. dms., t.c.l., same basis. lb. .17½- —
tanks, same basis lb. .14½- —
30°C, or above, tar dist., non-ret. dms., c.l., same basis lb. .18 - —
non-ret. dms., t.c.l., same basis. lb. .19 - —
tanks, same basis lb. .16 - —
USP, syn., dms., c.l., t.l., frt. alld lb. .18½- —
dms., same basis lb. .20½- —
tanks, same basis lb. .16½- —
Phenolphthalein, USP or yellow, 250-lb. dm., 2,000 lbs., frt. alld. lb. 1.30 - —
250-lb. dm., same basis lb. 1.35 - —
Phenothiazine drench fib dms., t.l., dlvd lb. .44 - —
fib. dms., t.t.l., same basis lb. .47 - —
NF, fib. dms., t.l., same basis lb. .43 - —
fib. dms., t.t.l., same basis lb. .46 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Phenyl salicylate (see Salol).
Phenylacetaldehyde, soln., 50%, bots. lb. 2.35 - —
100%, bots. lb. 4.00 - 4.65
Phenylacetic acid, pure, cryst., cns. lb 1.25 - 1.75
dl-Phenylalanine, dms. works lb. 27.00 - 37.50
l-Phenyl-3-carbethoxy pyrazolone-5, fib. dms. 200-lb lots dlvd E. lb. 3.45 - —
fib. dms., smaller lots dlvd E lb 3.80 - —
N-Phenyldiethanolamine, dms., c.l., dlvd E lb. .41 - —
dms., t.c.l., dlvd. E lb. .42½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms. frt allo. lb. 1.10 - —
o-Phenylenediamine, coml., fib. dms., 100 to 1,000 lbs., works lb. 1.70 - 1.80
p-Phenylenediamine, refd., dms., works lb. 1.42 - —
Tech., dms., works lb. 1.40 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
dms., t.c.l., same basis lb. .77 - —
Phenylethyl acetate bots. lb. 1.25 - 1.40
2-Phenylethyl alcohol, extra, dms. lb. 1.14 - 1.50
Standard, dms. lb. 1.10 - 1.60
b-Phenylethylamine, dms., 20,000 lbs. or more frt alld lb. 1.50 - —
dms., smaller lots, frt. alld lb. 1.70 - 1.85
Phenylethyiphenyl acetate bots lb 4.00 - 4.25
Phenylglyconic acid (see Mendelic acid).
Phenylhydrazine, 97%, 450-lb. dms. lb. 1.45 - —
1-Phenyl-3-methyl pyrazolone-5, fib. dms., 250-lb. lots, dlvd E lb 1.80 - —
fib dms. smaller lots. dlvd E lb 2.10 - —
o-Phenylphenol, dms., t.c.l., works. lb. .48 - .50
p-Phenylphenol, bgs., c.l., works lb. .38½- —
bgs., t.c.l., works lb. .43 - —
Philippine copal gum, pale, chips, bgs lb. .23¾- .26
nubs, bgs. lb. .33¼- .37
seeds, bgs. lb. 20 Nom.
sorts, bgs. lb. .22¾- .25
Phloroglucinol, coml., fib. dms., works lb. 6.40 - —
CP, bots., works lb 17.75 - —
Tech., fib dms., works lb 10.45 - —
Phloxin red toner (see Eosin red toner).
Phosgene, ret. cyls., works lb. .15½- —
Phosphate, defluorinated (see under D).
Phosphate rock, Curacao, Atlantic ports New Orleans ton 48.00 - —
Phosphate rock, Florida, land pebble, run-of-mine, washed, dried, unground, 66-68%, b.p.l., bulk, c.l. mines. short ton. 4.498 - —
68-70%, b.p.l., bulk, c.l., same basis short ton. 5.148 - —
70-72% b.p.l., bulk, c.l., same basis short ton. 5.728 - —
74-75%, b.p.l., bulk, c.l., same basis short ton. 6.628 - —
76-77% b.p.l., c.l., bulk, same basis short ton. 7.518 - —
Above Florida prices are based on fuel oil at $2.37 per bbl. and labor at $1.59.
Phosphoric acid, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 7.00 - —
cbys., l.c.l., same basis. 100 lbs. 7.23 - 7.75
tanks, t.w., works 100 lbs. 5.60 - —
80%, cbys., c.l., frt. equald 100 lbs 7.85 - —
cbys., l.c.l., works 100 lbs. 8.10 - 9.35
tanks, t.w., works 100 lbs. 6.00 - —
NF, 85%, cbys., c.l., works 100 lbs. 8.50 - —
cbys., l.c.l., works 100 lbs. 8.75 - 9.00
tanks, t.w., works 100 lbs. 6.65 - —
Phosphorus, amorph., red, dms., t.l., works lb. .55 - —
dms., smaller lots, works lb. .56 - .57
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
dms., t.c.l., works, frt. equald lb. .21½- —
tanks, works, frt. equald lb. .19 - —
Phosphorus oxychloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phosphorus pentasulfide, powd., dms., c.l., works lb. .13½- —
dms., t.c.l., works lb. .14½- .15½
Solid, dms., c.l., works lb. .11½- —
dms., t.c.l., works lb. .12½- .13½
Phosphorus pentoxide, dms., c.l., works lb. .1375- .1475
dms., t.c.l., works lb. .1475- .1675
Phosphorus sesquisulfide, dms., c.l., works lb. .38 - —
dms., t.c.l., works lb. .39 - .40
Phosphorus trichloride, dms., c.l., works lb. .14 - —
dms., t.c.l., works lb. .15 - —
tanks, works lb. .12½- —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .17 - .19
bgs., t.c.l., same basis lb. .18 - .20
tanks, same basis lb. .16½- .18½
Phthalimide, 97-98%, dms., frt. alld lb. .65 - —
Phthalocyanine blue, full strength, bbls., dlvd. E. of Rockies lb 2.90 - —
Resinated, bbls., same basis lb 2.75 - —
Water dispersable, bbls., same basis lb 1.52 - —
Phthalocyanine blue prices 1c. higher W of Rockies.
Phthalocyanine green toner, bbls., works lb 3.35 - —
Resinated, bbls lb 3.00 - —
Water dispersable, bbls lb 1.71 - —
Phthalocyanine green prices 1c. higher W of Rockies
Phthalylsulfacetamide, fib. dms., 1,000-lb. lots or more lb 5.00 - —
NF, fib. dms lb 5.20 - —
a-Picoline, dms., c.l., works, frt. equald lb. .43 - .43½
dms., t.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b-Picoline, 98%, dms., t.l., works. lb 1.05 - —
dms., t.c.l., same basis lb. 1.15 - —
tanks, same basis lb. .95 - —
b,g-Picoline, 5°C. dms., c.l., works. lb. .32½- —
dms., t.c.l., works lb. .33 - —
g-Picoline, dms., f.o.b., works lb 1.60 - —
tanks, t.l. same basis lb. 1.50 - —
Picric acid, NF, bbls. lb. .85 - —
Tech. bbls lb 44 - —
Pigment green B, kgs lb 1.45 - —
Pilocarpine hydrochloride, USP, bots oz. 5.25 - —
Pilocarpine nitrate, USP bots. vials. oz. 5.15 - —
Pimento, Jamaican, bgs lb. .68 - —
Mexican, bgs lb. .57 - —
Pimento berry oil, NF, dms. lb. 3.75 - 9.25
Pimento leaf oil, crude, cns lb. 2.10 - 2.48
Pine oil, dest.-dist., dms., t.c.l. works lb. .15 - —
dms. t.c.l. ex whse. New York. lb. .173 - —
Steam-dist., dms., ex whse., New York lb. .185 - —
dms., dlvd lb. .188 - —
Pineneedle oil, Siberian (see Abies Siberica oil)
Pinetar oil, coml. dms., c.l., works. lb. .0561- —
dms., t.c.l., works lb. .0634- —
dms., c.l., ex whse. New York. lb. .0745- —
tanks, works lb. .046 - —
NF, rectified, dms., incl., t.c.l., works, South lb. .40 - —
dms., t.c.l., ex whse, New York lb. .41½- —
Refd., dms., incl. t.c.l., works lb. .35 - —
dms., incl. t.c.l., ex whse New York lb. .36½- —
Pink root, bls. lb 1.75 - —
Piperazine, anhyd., dms., c.l., frt. alld lb. 1.80 - —
dms., t.c.l., same basis lb. 1.85 - —
Piperazine citrate, 36%, dms., 1,000 lbs. or more, frt. alld lb. 1.15 - —
Piperazine dihydrochloride, 51%, dms. 1,000 lbs. or more, frt. allo lb. 1.23 - —
Piperazine hexahydrate 44%, dms., 1,000 lbs. or more, frt. allo lb. .86 - —
dms., 200-900 lbs., frt. allo lb. .89 - —
Piperazine phosphate, 42% dms., 1,000 lbs. or more frt. allo.lb. 1.06 - —
Piperidine, dist., 98% min., dms., frt. equald lb 2.60 - —
Piperonyl butoxide dms. dlvd E lb 4.50 - 5.05

PITCHES
Pitch quotations are listed individually. For example, prices on Pitch, soybean, may be found in the S's under Soybean pitch.

Plaster of Paris (see Gypsum)
Platinum metal, works oz. 76.00 - 80.00
Pleurisy root bls. lb 45 - 50
Podophyllum resin NF dms. lb 15.60 - —
Poke root, bls lb .19 - .22
Polymyxin, bots., bulk, 50 billion units or more 1,000,000 units. .52 - —
bulk, bots. 25-50 billion units. 1,000,000 units .54 - —
bulk, bots. 1-25 billion units. 1,000,000 units .56 - —
Polyoxyethylene sorbitan monostearate, dms 20,000-lb. lots, works lb 42 - —
dms., 10,000-20,000-lb lots, works. lb. .44 - —
dms., smaller lots, works lb 47 - .49
Polyoxyethylene sorbitan tristearate, dms., 20,000-lb lots, works. lb .42 - —
dms., 10,000-20,000-lb. lots, works lb. .44 - —
dms., smaller lots, works lb. .47 - .49
Pontianak copal gum chips bgs lb. .26 - —
Nubs bgs lb .57 - .40
Poppy seed, Argentine, bgs. lb No stocks.
Dutch, bgs. lb. .22 - —
Danish, bgs. lb. .20½ - —
Polish, bgs. lb. .20 - —
Turkish, bgs. lb. .17½ - —
Potash, caustic, liq., 45% basis, dms., c.l., works 100 lbs 4.25 - —
dms., t.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs 3.70 - —
reg., flake, 88-92%, dms., c.l., same basis 100 lbs. 9.15 - —
dms., l.c.l., same basis 100 lbs. 10.20 - —
solid, 88-92%, dms., c.l., works. 100 lbs. 8.70 - —
dms. t.c.l. works 100 lbs 9.75 - —
Potassium acetate, NF 200-lb. dm., f.o.b works E lb. .31 - —
Potassium bicarbonate, USP, gran. dms lb. .22 - —
USP, powd., dms. lb. .24 - —
Potassium bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
bgs., t.c.l., works lb. .18½- .19¼
Potassium bichromate in dms. ¾c. higher.
Potassium bitartrate, NF, gran., powd., 100-lb. bgs., c.l., frt. equald lb. .37 - —
100-lb. bgs., 5,000 lbs. 1 shipt., same basis lb. .38 - —
100-lb. bgs., smaller lots, same basis lb. .40 - —
Potassium borohydride, powd., dms., works lb. 16.00 - 22.00
Pelletized postassium borohydride $1.25 per lb. higher in 1,000-lb lots.
Potassium bromate, dms., 1,000-lb. lots or more, works lb. .50 - —
dms., smaller lots, works lb. .52 - .63
Potassium bromide, USP, gran., bbls., kgs lb. .39 - 40
Potassium carbonate, dom., NF, gran., bbls. dms lb. .20 - —
Dom., tech. powd., bbls., dms lb. .21 - .22
Dom., calcinated, bgs., c.l., works, 100 lbs. 8.50 - —
bgs., t.c.l., same basis 100 lbs. 9.55 - —
Dom., hydrated, 83-85%, bgs., c.l., works 100 lbs. 7.10 - —
bgs., t.c.l., works 100 lbs. 8.15 - —
Potassium chlorate, cryst., dms., c.l., works lb. .12¼- —
dms., t.c.l., works lb. .13½- .14¼
Powd., dms., c.l., works lb. .12¾- —
dms., t.c.l., works lb. .14 - .15
works lb .12¼- —
NF, cryst., dms., 2,000 lbs. or more, works lb. .16¾- —
NF, gran. 25-lb metal dms lb. .36 - —
NF, powd., dms., 2,000 lbs. or more, works lb. .17¼- —
Potassium chloride indust., 99.9% KCL, bulk, c.l. works ton 29.00 - —
bgs., c.l., works ton 33.50 - —
99.3% KCL bulk, c.l., works ton 27.00 - —
bgs. c.l. works ton 31.50 - —
USP, cryst., dms. lb. .20 - .22
USP, gran., dms. lb. .21 - .23
USP, powd., dms. lb. .24 - .26
Potassium chloride, agricultural (see Potassium muriate)
Potassium chromate tech., dms., works lb. .50 - .51
Potassium citrate, NF, gran., 250-lb. dm., f.o.b. works E lb. .43 - —
powd., 250-lb. dms. same basis. lb. .46 - —
Potassium cyanide, dms 20,000-lb. lots or more, works lb. .42½- —
dms., 2,000-19,999 lb. lots, works. lb. .43 - —
dms., smaller lots, works lb. .44 - .44½
Potassium dichromate (see Potassium bichromate)
Potassium ferricyanide, dms., ton lots, works lb. .50 - —
dms., smaller lots, works lb. .65 - —
Potassium ferrocyanide, dms., ton lots lb. .24½- —
dms., smaller lots lb. .29 - —
Potassium fluoborate, fib dms., c.l., works lb. .30 - —
fib dms. t.c.l. works lb. .31 - —
Potassium fluoride, dms., works lb. .37 - .38
Potassium gluconate, 100-lb. dm., f.o.b works E lb. 1.67 - —
Potassium guaiacol sulfonate, NF, dms lb. 2.10 - 2.30
Potassium hydroxide, tech (see Potash caustic).
Potassium hydroxide, USP, pellets, 100-lb dms. 1 to 100-dm. lots lb. .33½- .38
Potassium hypophosphite, NF, fib. dms., 1,000-lb lots lb. 1.38 - —
Potassium iodide, USP, cryst., gran., or powd., 250-lb. dm., f.o.b. works lb. 1.40 - —
Potassium manure salt, 22% K2O, bulk, c.l. works unit-ton .17 - .1765
Potassium metabisulfite, gran., dms. lb. .16 - —
Powd., dms. lb. .27 - —

Potassium muriate, standard, bulk, c.l., works, unit-ton .32 - .34
bagged, 60% minimum K.O. same basis ton 24.10 -25.30
Gran., bulk, c.l., works, unit-ton .32½- .34½
bagged, 60% minimum K.O. same basis ton 24.40 -25.60
Inside prices apply to material contracted for prior to July 1, 1959.
Outside prices apply to material contracted for after that date but also for delivery during the current month.
Potassium nitrate, NF, cryst., bbls., 20-ton lots 100 lbs 17.00 —
bbls., smaller lots 100 lbs 18.00 -19.00
NF, gran., bgs., 20-ton lots 100 lbs 9.50 —
bgs. smaller lots 100 lbs 11.00 -12.00
NF, powd. bgs., 20-ton lots 100 lbs 10.50 —
bgs. smaller lots 100 lbs 12.00 -13.00
Potassium oxalate, neutral, tech., fine gran., powd., 300-lb. dm., f.o.b. works E lb .32 - —
Potassium pentaborate, gran., dms., c.l., works ton 219.50 - —
dms., ton lots, ex whse. ton 311.00 - —
dms., smaller lots, ex whse ton 316.00 - —
Powdered potassium pentaborate $10 per ton higher.
Potassium perchlorate, dms., c.l., works lb .18½- —
dms., l.c.l., works lb .19 - .20
Potassium permanganate, comm., kgs., works lb .25 - .33
USP, dms., works lb .29 - .35
Potassium persulfate, dms., c.l., works lb .17½- —
dms., l.c.l., works lb .18 - .21
Potassium pyrophosphate, tetrabasic, dms., works lb .15½- .18½
Potassium prussiate red (see Potassium ferro-cyanide)
Potassium prussiate yellow (see Potassium ferro-cyanide).
Potassium silicate, electrical grade, 30° Be, 1:2.0, dms., c.l., works 100 lbs 6.50 - —
dms., l.c.l., 5 dm. lots or more, works 100 lbs 7.25 - 7.65
tanks, works 100 lbs .6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs 5.95 - —
dms., l.c.l., 5 dm. lots or more works 100 lbs 6.70 - —
tanks, works 100 lbs 5.60 - —
Glass grade, bgs., c.l., works 100 lbs 17.30 -18.15
bgs., l.c.l. works 100 lbs 17.80 - —
Soln., 29° Be, 1:2.5, dms., c.l., works 100 lbs 4.95 - —
dms., l.c.l., 5-dm. lots or more, works 100 lbs 5.70 - —
tanks, works 100 lbs 4.60 - —
Potassium silicofluoride, bgs., works lb .09½- .10
Potassium silicofluoride in drums, 0.4c. per lb higher.
Potassium stannate, dms., frt. alld., E lb .771 - .844
Potassium sulfate, agricultural, bulk, c.l., works unit-ton .64½- .66½
Inside price applies to tonnage contracted for prior to July 1, 1959.
Outside price applies to tonnage contracted for after that date but also for delivery during the current month
Potassium sulfate, NF VII, cryst., dms lb .31 - .33
NF VII, gran., dms lb .18½- —
NF VII, powd., dms lb .16 - .17
Potassium sulfocyanate, NF, cryst. (see Potassium thiocyanate)
Potassium thiocyanate, NF, cryst., dms., works lb .96 - .98
Tech., dms., works lb .77 - .79
Potassium titanate, ctns., c.l., works, lb .16¼- —
ctns., 5-ton lots, works lb .16½- —
ctns., 1-ton lots or less, works lb .16¾- —
Potassium-magnesium sulfate, basis 40% K_2SO_4 and 18% MgO, bulk, works, base price ton 13.45 - —
bulk, works, July forward ton 14.00 - —
Potassium-sodium tartrate, NF, gran. or powd., 250-lb. dms., c.l., f.o.b. works E lb .42½- —
250-lb. dms., 5,000-lb. lots, same basis lb .43 - —
250-lb. dms., same basis lb .43½- —
Potassium-titanium fluoride, fib, dms., works lb .39 - .40
Potassium-zirconium fluoride, fib, dms., c.l., works lb .50 - —
fib dms., l.c.l., works lb .52½- .55
Pregnenolone, bots gram No prices
Pregnenolone acetate, bots. gram No prices
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld. lb 2.25 - —
dms., 100-500 lb lots lb 2.95 3.15
Progesterone, USP, bots. gram No prices.
Progesterone acetate, bots. gram No prices.
Propenyl guaethol, dms lb 24.30 -27.00
Propionic acid, syn. pure, dms., c.l., works lb .23¼- —
dms., l.c.l., works lb .24¼- —
tanks, works lb .20¾- —
n-Propyl acetate, dms., c.l., dlvd. lb .14¾- —
dms., l.c.l., dlvd. lb .16¼- —
tanks, dlvd. lb .12¼- —
n-Propyl alcohol, dms., c.l., dlvd lb .14 - —
dms., l.c.l., dlvd. lb .15½- —
tanks, dlvd lb .11½- —
n-Propyl gallate, dms., 100 to 2,000-lb lots, works lb 3.90 - 4.40
p-Propyl-p-hydroxybenzoate, USP, dms lb 2.30 - 2.40
Propyl thiouracil, bots., 50 kilo lots or more kilo 55.00 - —
bots., smaller lots kilo 55.10 -55.30
n-Propylamine, dms., c.l., dlvd lb 1.24 - —
dms., l.c.l., same basis lb 1.255 - —
Propylene dichloride, consumers' dms., c.l., dlvd. E lb .0845- —
dms., l.c.l., same basis lb .0995- —
tanks, same basis lb .07 - —
Propylene dichloride prices in West 1c. higher, same basis
Propylene glycol, indust., dms., c.l., dlvd. E lb .15 - —
dms., l.c.l., same basis lb .16¾- —
tanks, same basis lb .12½- —
USP, dms., c.l., dlvd. E lb .17 - —
dms., l.c.l., same basis lb .18¾- —
tanks, same basis lb .14½- —
Propylene glycol methyl ether, dms., c.l., dlvd lb .20 - —
dms., l.c.l., same basis lb .21 - —
tanks, same basis lb .18½- —
Propylene oxide, dms., c.l., dlvd. E, lb .18 - —
dms., l.c.l., dlvd. E lb .19½- —
tanks, dlvd. E lb .15½- —
Psyllium seed, black, bgs. lb .30 - .35
Blonde, bgs. lb .18 - .20
Husks, bgs. lb .42 - .45
Pumice, dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb .03⅜- .04¼
bgs., smaller lots lb .03⅞- —
Imp., Italian, silk-screen, coarse, bgs., ton lots lb .03½- —
fine, bgs, ton lots lb .04 - —
sun dried, coarse, bgs ton 60.00 - —
fine, bgs. ton 60.00 -70.00

Pumpkin seed, bgs. lb .25 - .30
Pyrethrins, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bgs., ton, works lb .50 - —
Powd., 1.3% pyrethrins, bgs., ton, works lb .71 - —
Pyrethrum liquid, 20/1 basis (2 grams pyrethrins per 100cc odorless base), dms., works gal 9.60 - 9.80
100/1 basis (10 grams pyrethrins per 100cc odorless base), dms., works gal 45.90 -46.90
Pyrethrum oleoresin, dewaxed, 20% dms., works lb 11.00 -11.35
purif., 20%, dms., works lb 11.00 -11.35
Pyridine, denat., dms c.l., works and frt. equald gal 2.77 - —
dms l.c.l. same basis gal 2.80 - —
Refd., 2°, non-ret. dms., l.c.l., same basis lb .70 - —
tanks, same basis lb .65 - —
Pyridoxine hydrochloride USP, 500-gram bots., dms., f.o.b. works, kilo 175.00 - —
Pyrites, Canadian, 48-50% S, mines, long-ton 5.00 - 6.00
Pyrocatechol (see Catechol)
Pyrogallic acid, NF (see Pyrogallol)
Pyrogallic acid, tech., bbls. lb 3.17 - 3.25
Pyrogallol, NF, 100 lb. dms. lb 3.50 - —
Pyroxylin, USP bots. lb 9.50 - —

Q

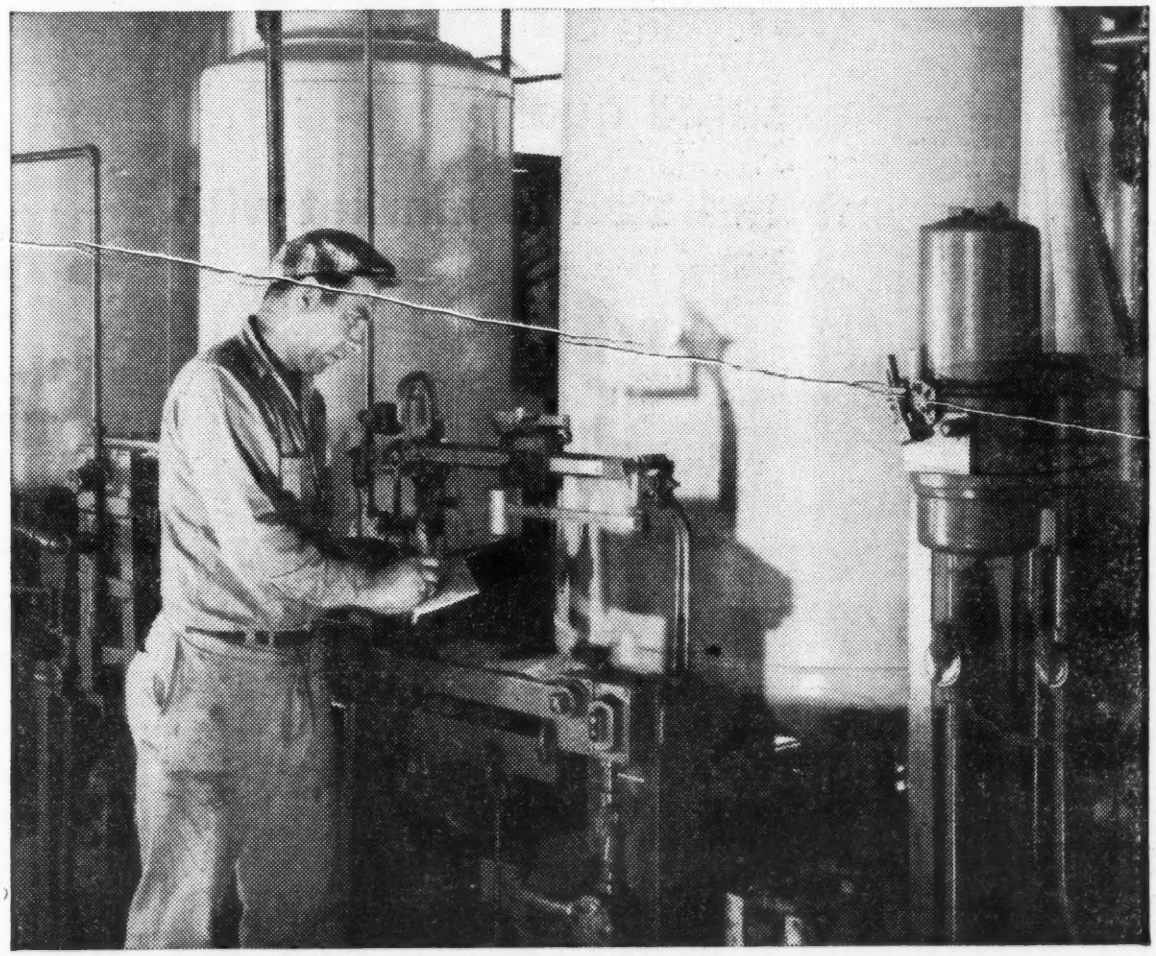
Quassia chips lb .10 - —
Quicksilver (see Mercury metal)
Quince seed, bgs lb 1.15 - 1.50
Quinidine sulfate, USP, cns. oz .74½- .77
Quinine, NF, cns., 100-oz lots oz .34 Nom.
Quinine bisulfate, USP, cns oz .27½- .29
Quinine hydrochloride, cns. oz .23 - .25
Quinine sulfate, USP, cns. oz .24½- .26
Quinoline, dms., c.l., frt. equald lb .50¾ —
dms., l.c.l., same basis lb .51¼- —
tanks, same basis lb .50 - —

R

R salt, paste, dms frt. alld., 100% basis lb .98 - —
Powd., frt. alld. 100% basis lb 1.08 - —
Rapeseed oil, dms. lb .15 - .15¼
tanks lb .13 - —
Rare earth chloride, 46%, dms., dlvd lb .25 - —
Rare earth oxalate, 45-50%, bgs., works lb 1.15 - —
Rauwolfia serpentina root, powd., bbls. dms lb 1.00 - 1.20
Red carmine No. 40 (see Carmine).
Red oil (see Oleic acid)

RED PIGMENTS
Red pigment quotations are listed individually. For example, prices on Red, lithol toner, may be found in the L's under Lithol red toner.

Red precipitate (see Mercuric oxide, red).
Reserpine, cryst., bots gram 1.25 - —
Resorcinol, tech grade, dms., c.l., works, frt. equald lb 77¼- —
dms., l.c.l., same basis lb 78¼- —
USP, powd., dms., works lb 2.95 - —
Resorcinol monoacetate, NF, dms lb 2.50 - —
Rhatany root, bgs. lb .14 16
Rhodamine red toner, molybdated, PMA, kgs., works lb 6.00 - —
Tungstated, PTMA works, kgs lb 6.60 - —
Rhodinol, 5-lb. cans lb 42.00 -51.00
Synthetic lb 14.00 16.00
Rhubarb root, India whole, bgs lb .25 - —
powd., bgs. lb .35 - —
Riboflavin, USP, fib. dms., kilo or more dlvd kilo 36.00 - —
Riboflavin, USP, readily soluble, bots., dlvd kilo 120.00 - —
Riboflavin, 5-phosphate-sodium fib. dms., kilo or more dlvd kilo 104.50 —
Rice bran oil, clarified, dms. l.c.l. lb .14½- .15
tanks, dlvd. E lb .12½- —
Ricinoleic acid (see Castor oil acids split)
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Coaltar pitch roofing)
Rose oil, nat. Bulgarian bots oz 72.00 —
Turkish, bots. oz 55.00 -58.00
Rosemary oil, Spanish, NF, cns., dms lb .97 1.20
Spanish, tech., cns., dms. lb .50 - 1.20
Rosin, gum and wood (see Naval Stores in Protective Coatings market)
Rotenone, fib. dms., works, unit-lb. .12 - —
Resin, 25-45% fib dms. works, unit-lb. .12 - —



NOW...
THERE'S MORE FATTY ACID PER POUND IN THE ALL-NEW PAMAK® 4A

When Pamak 4A, the standard of the industry, was introduced in October of 1957, it was the first of the lower priced tall oil fatty acids with all of the properties needed for use in high-quality alkyd resins.

Now, two years later, Pamak 4A is again improved to set new standards of value for alkyds. Color is lighter. Rosin content is reduced. And undesirable unsaponifiables are held to a new minimum.

The result—there's more fatty acid in each pound; more resin-making ingredient; less waste.

So—why not put this all-new Pamak 4A to work for you today. Write, wire, or phone your PMC Pamak specialist.

Paper Makers Chemical Department
HERCULES POWDER COMPANY
INCORPORATED
Wilmington 99, Delaware

PT59-1

Rottenstone bgs. 5-ton lots, ex-whse lb. 03¾- —
bgs. ton lots same basis lb. .04¼- —
Rubber solvent, petroleum, 115°F-245°F b.r., tankcars, New Jersey and New York gal. .19 - —
Group 3 gal. .13875- —
Houston, Texas gal. .155 - —
Rue oil, bots lb 2.75 3.00
Rutin, NF fib dms., 10 kilo lots kilo.13.75 - —
fib dms. 5 kilo lots kilo14.00 - —
fib dms., 1 kilo kilo.14.50 - —
Ryania 100%, powd. bgs., c.l., works lb. .22 - —
bgs. l.c.l. same basis lb. .24 - —

S

S acid, bbls., works lb 3.25 - —
Sabadilla seed activated, ground with lime, bbls lb .42 - .44
Saccharin, calcium, fib dms., 1,000-lb. lots, works lb 2.50 - —
USP, gran, soluble dms., 1,000-lb. lots lb. 1.40 - —
dms., smaller lots lb. 1.50 - —
USP, powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.45 - —
dms., smaller lots lb. 1.55 - —
USP, powd., insoluble, dms., 1,000-lb. lots lb. 1.43 - —
dms., smaller lots lb. 1.53 - —
Safflower oil, dms., New York tanks, Atl. Coast lb. .1785- .1830
lb. .1585- —
Saffron, Mancha Superior, tins lb.25.00 - —
Safrol, dms. lb. .70 - —
Sage, Dalmatian, bgs. lb. .40 - —
Greek, cns. lb. .16 - —
Italian, cns. lb. .18 - —
Sage oil, clary, bots lb.20.00 -30.00
Dalmatian, cns. lb. 3.25 - 3.60
Spanish, cns. lb. 1.25 - 1.75
Sal soda (see Soda sal).
Salicylaldehyde, dms., c.l., t.l., f.o.b. plant, frt. equald lb 1.23 - —
dms. l.c.l. same basis lb 1.25 - —
Salicylamide, 100-lb dms lb 1.05 - —
Salicylic acid crude, fib dms., c.l., t.l., frt alld lb. .37¼- —
fib dms. l.c.l., frt. alld. on 100 lbs. or more lb. .38½- —
Sublimed, tech., fib. dms., c.l., t.l. dlvd lb. .39¼- —
fib dms., l.c.l. dlvd lb. .43½- —
USP, cryst., 200-lb. fib. dms., 1,000 lbs. or more lb. .50½- —
200-lb fib. dms., less than 1,000 lbs lb. .53½- —
Salicylic acid, USP, cryst., 100-lb. fib. dms., 1,000-lbs. or more, lb. .52½- —
100-lb fib. dms., less than 1,000 lbs. lb. .55½- —
USP, powd., 100-lb. fib. dms., 1,000 lbs. or more lb. .57½- —
100-lb. fib dms., less than 1,000 lbs lb. .60¼- —
Salol, NF, gran., bbls., kgs. lb. 1.20 - —
Powdered salol, 25c per lb. higher
Salt, rock, paper bgs., c.l., 100 lbs. 1.09 - —
Salt, table vacuum, common, fine, paper bgs. c.l. 100 lbs. 1.34 - —
Saltcake, dom., bulk, works, 100% Na_2SO_4 basis ton.28.00 - —
Saltpeter (see Potassium nitrate)
Sandalwood, E. Indian, chips, bgs. lb. .65 - .66
powd. fib. dms. lb. .75 - .76
Sandalwood oil, cns lb.15.75 -16.50
Sarcosine, tech., tanks, f.o.b., works, frt equald lb. 1.03 - —
Sardine oil, crude, tanks, Pac. coast. lb. No stocks
Sassafras oil, artif., dms. lb. .43 - —
Nat., dom., dms lb. 1.45 - 2.15
Savin oil, USP, cns lb. 4.50 - 5.25
Savory oil, cns lb. 4.75 - —
Schaeffer's salt, paste, dms., frt. alld. 100% basis lb. .85 - —
Powd., bgs., frt. alld. 100% basis, lb. .95 - —
Scopolamine hydrobromide, USP, bots oz.13.00 - —
Sebacic acid, CP, bgs., c.l., works, lb. .69½- —
bgs., l.c.l., works lb. .71½- —
Purified, bgs., c.l., works lb. .65½- —
bgs., l.c.l., works lb. .67½- —
Seidlitz mixture, fib. dms. 5,000-lb. lots lb. .30½- —
fib. dms., smaller lots lb. .31 - .32
Selenium, powd., 99½%, dms., dlvd. lb. 7.00 - —
Senega root, bls. lb. 3.00 - 3.25
Senna leaves, Alexandria, whole and half, bls lb. .22 - —
siftings lb. .18 - —
Senna leaves, Tinnevelly, No. 1, bls. lb. .22 - —
No. 2, bls. lb. .18 - —
No. 3, bls. lb. .14 - —
pods, bls. lb. .28 - —
powd., bbls., bxs. lb. .17 - —
Serpentaria root, bls. lb. 6.50 - —
Sesame oil, USP, dms. lb .38 - .39
Sesame seed, Colombian, bgs. lb. .15½- —
Lebanese, hulled, bgs. lb. .19 - —
Nicaraguan, hulled, bgs lb. .21½- —
nat., bgs. lb. .14 - —
Salvadorian, nat., bgs lb. .13 - —
Shellac, bleached, bonedry, bgs., 1,500-lb. lots lb. .46 - —
bbls., 1,500-lb. lots lb. .47 - —
kgs., 1,500-lb. lots lb. .48 - —
Bonedry shellac prices for less than 1,500-lb lots 1c. per lb. higher for all packages.
Shellac, bleached, refd., bgs., 1,500-lb. lots lb. .56 - —
bbls., 1,500-lb. lots lb. .57 - —
kgs., 1,500-lb. lots lb. .58 - —
Shellac, orange, lemon No. 1, bgs., 10-bg. lots lb. .37 - .39
lemon No. 2, bgs., 10-bg. lots, lb. .34 - .37
superfine, bgs., 10-bg. lots lb. .32 - .34
Shellac in 1 to 10-bg. lots 1c. per lb. more.
Shingle stain oil, tar distillate, dms., c.l., works gal. .37 - —
dms., l.c.l., works gal. .48 - —
tanks, works gal. .25 - —
Sienna pigment, burnt, paper bgs., c.l., works lb. .06½- .18½
paper bgs., l.c.l., works lb. .06¾- .17¾
Raw, paper bgs., c.l., works lb. .06¾- .16¾
paper bgs., l.c.l., works lb. .07 - .17
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works ton.25.00 - —
bgs., l.c.l., works, ex whse. ton.45.00 -55.00
Hard-quartz, 99½%, 325 mesh,, bgs. c.l., works ton.20.00 - —
bgs, l.c.l., works ton 25.00 - —
99½%, 140 mesh, bgs., c.l., works ton.15.00 - —
bgs., l.c.l., works ton.20.00 - —
Silicon tetrachloride, tech., dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .22 - .30½
tanks, works lb. .17 - —
Silver bullion, ingots, cs Troy oz. .91⅛- —
Silver cyanide, bots., 1,000-oz lots, oz. .94¾- —
bots., 500-oz. lots oz. .95¼- —
bots., 100-oz. lots oz. .96¼- —
Silver nitrate, CP, cryst., bots., 3,000-oz. lots oz. .67¼- —
dms., 1,000-oz. lots oz. .67¼- —
bots., 250-500-oz. lots oz. .68¾- —
USP granular silver nitrate 4c. per oz. higher.
Silver proteinate, mild, USP, bots., dms., 1,000-oz. lots oz. 1.15 - —
Strong, NF, bots., dms., 1,000-oz. lots oz 1.10 - —
Snakeroot oil, Canada, cns lb.40.00 -43.00
Soapbark, crushed, bls lb. .30 - .35
Powd., bls. lb. .35 - .40
Whole, bls. lb. .20 - .25
Soda ash, dense, 58%, paper bgs., c.l., works 100 lbs. 1.90 - —
paper bgs., l.c.l., stock pts., 100-lbs. 3.00 - 4.77
bulk, c.l., works 100 lbs. 1.60 - —
Light, 58%, paper bgs., c.l., works 100 lbs. 1.85 - —
paper bgs., l.c.l., stock pts. 100 lbs. 3.95 - 4.72
bulk, c.l., works 100 lbs. 1.55 - —
Soda, caustic, flake, 76%, dms., c.l., works, frt. equald 100 lbs. 5.20 - —
liq., 50%, sellers' tanks, works, dry basis 100 lbs. 2.90 - —
50%, rayon type, sellers' tanks, works, dry basis 100 lbs. 2.90 - 3.00
73% sellers tanks, works, dry basis 100 lbs. 3.00 - —
73%, rayon type, sellers' tanks, works, dry basis, 100 lbs. 3.00 - 3.10
solid, 76%, dms., c.l., works, 100 lbs. 4.80 - —
Soda, sal, conc., bgs., c.l., works, 100 lbs. 2.50 - —
bgs. smaller lots, works 100 lbs. 2.80 - —
Sodium acetate, anhyd., bgs., c.l., dlvd. E lb. .14½- —
NF, 60% gran., dms. c.l., works, lb. .15½- —
dms., l.c.l., works lb. .17½- —
Sodium alginate, NF, white powd., dom., 300 lbs. or more lb. 1.02 - —
Sodium p-aminosalicylate, dms., 100-lb. lots or more frt. adjusted lb. 1.90 - —
Sodium antimoniate, bgs., c.l., dlvd. E lb. .25½- —
bgs., l.c.l., dlvd. E lb. .27 - —
Sodium arsenate, 60% arsenic pentoxide, dealers, dms., ton or more, works lb. .26 - —
dms., less than ton lots, works lb. .26½- —
Sodium arsenite, 90% pink powder, 75% arsenious oxide, dealers, dms., ton lots or more, works lb. .17½- —
dms., less than ton lots, works lb. .18 - .19
Sodium ascorbate, dms., 25-50 kilo dms., f.o.b. works kilo.10.00 - —
10-kilo dm., same basis kilo.10.35 - —
5-kilo dm., same basis kilo.10.75 - —
1-kilo bot., same basis kilo.11.00 - —
Sodium benzoate, tech., dms., c.l., t.l., frt. alld lb. .35 - —
dms., l.c.l., same basis lb. .39 - —
USP, dms., c.l., t.l. frt. alld lb. .38 - —
dms., ton lots, same basis lb. .43 - —
dms., 1,000-lb. lots, same basis, lb. .45 - —
Sodium bicarbonate, USP, gran., bgs., c.l., works 100 lbs. 2.95 - —
bgs., l.c.l., works 100 lbs. 3.85 - —
USP, powd., bgs., c.l., works, 100 lbs 2.55 - —
bgs., l.c.l., works 100 lbs. 3.45 - —
Sodium bichromate, gran., bgs., c.l. t.l., works lb. .13 - —
bgs., l.c.l., works lb. .13½- .14¾
Sodium bichromate in dms. ½c. per lb. higher
Sodium bifluoride, bbls. c.l., works, frt. equald lb. .19¼- —
bbls., l.c.l., same basis lb. .2025- —
Sodium bisulfate, bulk, c.l., works, 100 lbs. 2.00 - —
dms., c.l., frt. equald 100 lbs. 3.00 - 3.60
dms., l.c.l., frt. equald 100 lbs. 3.50 - 4.10
Sodium bisulfite, anhyd., bgs., c.l., works 100 lbs. 5.00 - —
bgs., l.c.l., works 100 lbs. 5.45 - —
Soln., 35°, bbls., c.l., works 100 lbs. 1.70 - —
bbls., l.c.l., works 100 lbs. 2.20 - —
Sodium borate (see Borax)
Sodium borohydride, powd., dms., l.c.l., works lb.33.00 -40.00
dms., c.l., works lb.19.90 - —
Sodium borohydride, stabilized water soln., 12% $NaBH_4$, 100% basis, dms., works lb.15.00 - —
Pelletized sodium borohydride $1 per lb higher in 1,000-lb lots.
Sodium bromide, USP, gran., dms., works lb. .40 - —

yours for the specifying...

assured quality

from batch to market with

Quality in glassware is more easily achieved if the raw material source is right. American Potash and Chemical Corporation, as your source of uniformly high quality Soda Ash, has grown with the industry year by year...helping you meet competitive challenges...constantly upgrading quality to fill all your requirements...consistently delivering as you specify. Your product's quality—from batch to market—will be enhanced by the demonstrated production capacity, technical information, and service follow-through that typifies TRONA* service in Soda Ash...*yours for the specifying.*

American Potash & Chemical Corporation

3000 WEST SIXTH STREET, LOS ANGELES 54, CALIFORNIA
99 Park Avenue, New York 16, New York
Sales Offices: LOS ANGELES, NEW YORK, CHICAGO, SAN FRANCISCO, PORTLAND (Ore.), ATLANTA, COLUMBUS (O.), SHREVEPORT

*TRADENAME AND TRADEMARK OF APACO

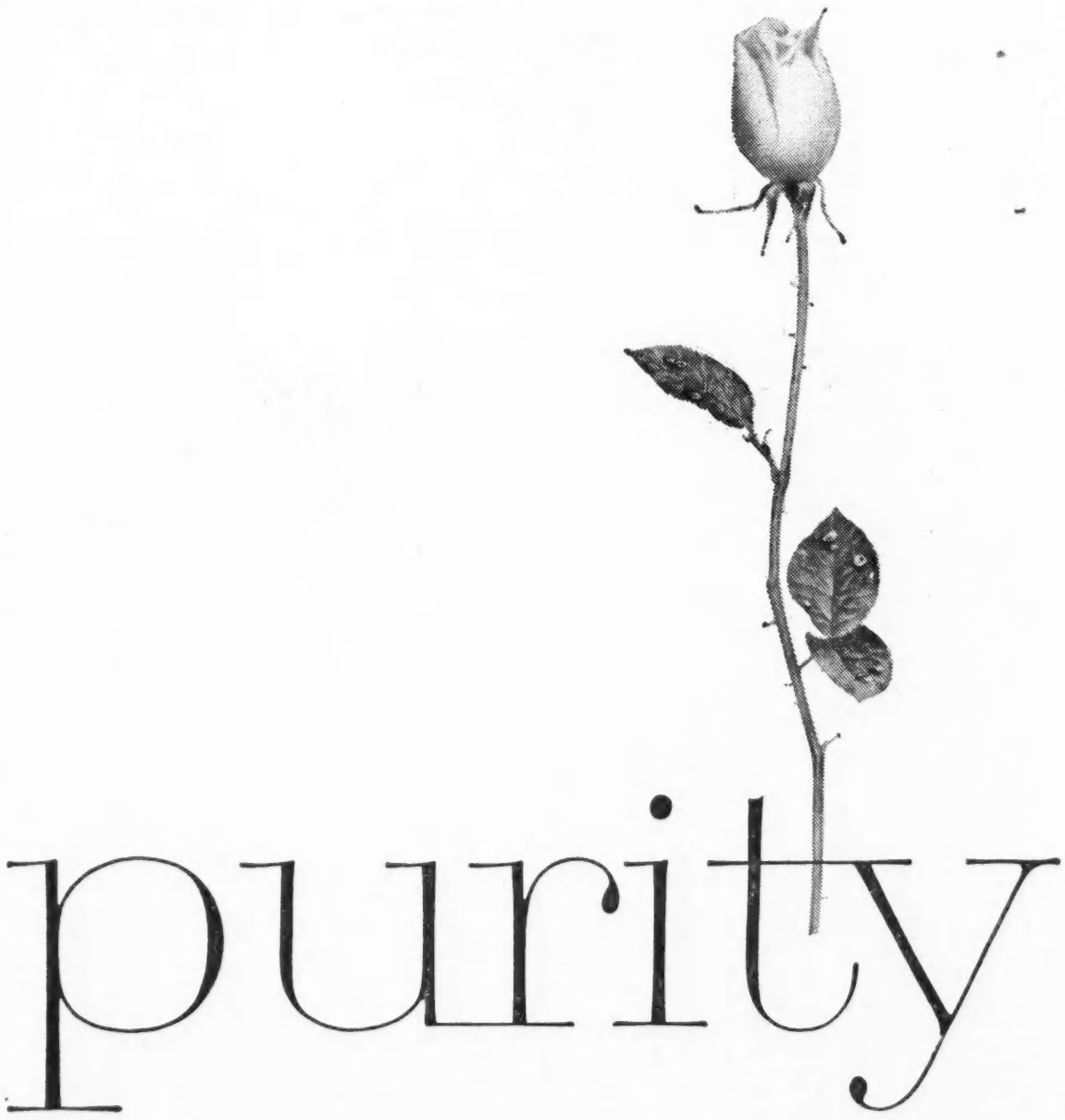
PRODUCERS OF: BORAX • POTASH • SODA ASH • SALT CAKE • LITHIUM • BROMINE CHLORATES • PERCHLORATES • MANGANESE DIOXIDE • THORIUM • YTTRIUM • RARE EARTHS and other diversified chemicals for Industry and Agriculture

Sodium carbonate, cryst., monohydrated (see Soda, sal)
Sodium carbonate, monohydrated, bgs., c.l., works 100 lbs. 3.10 - —
bgs., l.c.l., works .. 100 lbs. 3.50 - —
Sodium carboxymethyl cellulose (see CMC).
Sodium chlorate, cryst., 350-lb. dms., c.l., works lb. .09 - —
dms., l.c.l., works lb .09½- .10½
Sodium chlorate in 100-lb. dms., only, ¼c. per lb higher.
Sodium chloride, tech. (see Salt).
Sodium chloride, USP, gran., bgs. lb .03 - —
Sodium chlorite, tech., dms., c.l., works lb. .58 - —
dms., 20-dm lots or more works. lb. .66 - —
dms., smaller lots, works lb. .70 - .73
Sodium chloroacetate, tech., dms., c.l., works lb. .27 - —
dms., l.c.l. works lb. .28 - —
Sodium chromate, anhyd. fib. dms., c.l., t.l., works lb .14¾- —
fib dms. l.c.l., works lb. .15¼ .16½
Sodium chromate, tetrahydrate, bgs., c.l., t.l., works lb. .1015- —
bgs. l.c.l lb. .1065- .1190
Sodium citrate, anhyd. 200-lb. dm., f.o.b. works E lb. .62 - —
NF VIII, gran. bgs., c.l., same basis lb. .26 - —
USP XIV gran. bgs. c.l., same basis lb. .29 - —
Sodium citrate USP powd prices ½c higher.
Sodium cyanate, dms., 1,000-lb lots, works lb. .85 —
dms., smaller lots, works lb. .90 1.10
Sodium cyanide, flake, 96-98%, dms., c.l or 20,000-lb. lots lb. .193 - —
dms., over 1,000-lb lots lb. .203 - —
dms., 100-lb to 1,000-lb lots lb. .213 - —
Gran sodium cyanide 1c higher
Sodium cyclamate, 100-lb dm., f.o.b. works lb. 1.95 - —
Sodium diacetate anhyd., 39-41% acetic acid, dms., c.l., works lb. .18 - —
250-lb dms. l.c.l. works lb. .18¾- —
Tech., 33-35% acetic acid, dms., l.c.l., works lb. .13 - —
250-lb. dms., l.c.l., works lb. .15¼ —
Sodium dimethyl dithiocarbamate, 40% soln. dms. c.l., t.l., frt. alld., 100% basis lb. .42 - —
dms., l.c.l., t.l., same basis lb. .47 - .52
tanks, same basis lb. .38 - —
Sodium ferrocyanide, bgs., 10-ton lots lb. .13½- —
bgs. smaller lots lb. .14¾- —
Sodium fluoride, white, 97%, fib. dms., c.l., works, frt. equald lb. .1390- —
fib. dms., l.c.l., works, frt. equald lb. .1465- —
Sodium formate, bgs., c.l. works, 100 lbs 7.05 - —
bgs. l.c.l. ex whse 100 lbs 8.65 - —
Sodium gentisate, 100-lb fib. dms. lb 5.50 - —
Sodium gluconate, refd., 250-lb. dm., f.o.b. works E lb. .84 - —
Tech. bgs. c.l. t.l. same basis lb. .34 - —
Sodium hydride, 50% soln. in oil, dms., works lb. 1.25 - 2.50
25% soln. in oil, dms. 50 lbs or less, f.o.b. shipping point lb. 2.20 - —
dms., 50-99 lbs., same basis lb. 1.77 - —
dms., 100-999 lbs., same basis lb. 1.20 - —
dms., 1,000 lbs or more, same basis lb. .95 - —
Sodium hydrosulfide (see Sodium sulfhydrate)
Sodium hydrosulfite dms. c.l., frt. alld lb. .22½- —
dms. l.c.l. frt alld. lb. .24¾- —
Sodium hydroxide, NF pellets, 100-lb dms. 1 to 100-dm lots, lb. .23½ .28
Sodium hydroxide tech (see Soda, caustic).
Sodium hypophosphite NF, dms., 1,000-lb lots lb .97 —
Sodium hyposulfite (see Sodium thiosulfate).
Sodium iodide, USP, 300-lb. dm., f.o.b. works lb. 1.98 - —
Sodium lauryl sulfate, dms., c.l., dlvd lb. .20½- —
dms., l.t.l., dlvd lb. .21½- —
tanks, dlvd. lb. .19½- —
Sodium lignin sulfonate, bgs., c.l., works 100 lbs. 4.25 - 6.50
l.c.l., bgs., works 100 lbs 4.40 - 7.00
Sodium metabisulfite (see Sodium bisulfite)
Sodium metaborate octahydrate, gran., bgs., c.l., works ton 210.00 - —
bgs., ton lots, ex whse 100 lbs. 8.00 - —
bgs., smaller lots, ex whse, 100 lbs 9.25 -11.25
Tetrahydrate, bgs., c.l., works ton 210 - —
bgs., ton lots, ex whse 100 lbs 13.93 - —
bgs., smaller lots, ex whse, 100 lbs. 15.18 -17.18
Sodium, metallic, bricks, c.l. works, lb. .21 - —
Fused, 18,000-lb. lots or more, works lb. .19½- —
tanks, works lb. .17 - —
Sodium metalinate, bbls., frt. alld, lb. .62 - —
Sodium metaphosphate, bgs., c.l., f.o.b. shipping pt. 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 - —
dms., c.l., same basis 100 lbs. 11.70 - —
dms., l.c.l., same basis 100 lbs. 12.45 - —
Sodium metasilicate, anhyd., bgs., c.l., works 100 lbs 5.70 - —
bgs., 6,000-19,900 lb lots works 100 lbs 6.05 - —
dms., c.l., works 100 lbs 6.20 - —
dms., l.c.l., works 100 lbs 6.55 - —
Sodium metasilicate pentahydrate, bgs., c.l., works 100 lbs 4.45 - —
bgs., l.c.l., works 100 lbs 4.80 - 6.75
dms., c.l., works 100 lbs 4.95 - —
dms., l.c.l. works 100 lbs. 5.30 - 7.25
Sodium molybdate anhyd., dms., works, frt. equald lb. .92 - .99
Cryst., dms., works, frt. alld lb. .74 - .76
Sodium monoglutamate (see Monosodium glutamate).
Sodium monohydrate (see Sodium carbonate, monohydrated).
Sodium naphthionate, bbls. lb. .70 - —
Sodium nitrate, dom., crude, bgs., c.l. works ton 48.00 - —
bulk, c.l., works ton 44.00 - —
Imp., crude, 100-lb. bgs., c.l., Atl., Gulf, Pac., whse ton 48.00 - —
bulk, c.l., same basis ton 44.00 - —
Sodium nitrite, USP, bbls., c.l., works, frt. equald 100 lbs. 9.00 - —
bbls., l.c.l., same basis 100 lbs. 11.00 - —
Sodium orthosilicate, conc., dms., c.l., works 100 lbs. 6.70 - —
dms. l.c.l., works 100 lbs. 7.05 - 7.65
Hydrated, flake, bbls., c.l., works, 100 lbs. 5.65 - —
bbls, l.c.l., works 100 lbs. 7.60 - 7.90
Sodium oxalate, 98%, bgs., works, 100 lbs. 12.35 - —
Sodium para-aminobenzoate (see Sodium p-aminobenzoate).
Sodium para-aminosalicylate (see Sodium p-aminosalicylate).
Sodium pentachlorophenate, briquets, dms., c.l., works, frt. equald lb. .26 - —
dms., l.c.l., same basis lb. .27½- .34

Sodium pentachlorophenate, pellets, dms., c.l., same basis lb. .26 - —
dms., c.l., same basis lb. .27½- .34
Powd., dms., c.l., same basis lb. .25 - —
dms., l.c.l., same basis lb. .26½- .33
Sodium pentobarbital, USP, dms., 100 lbs. or more lb. 6.00 - —
Sodium perborate, NF, tech., bgs., c.l., works lb. .18½- —
bgs., l.c.l., works lb. .19 - .21
Sodium peroxide, dms., c.l., t.l., dlvd, E. of Miss lb. .21½- —
dms., l.c.l., same basis lb. .22 - .22½
Sodium phenobarbital, USP, 100-lb. dms lb 3.75 - —
Sodium phenosulfonate, USP IX, gran., dms lb. .52 - .53
NF, powd., dms lb. .55 - .56
Sodium phosphate, dibasic, anhyd., bgs., c.l., frt. equald, 100 lbs. 7.95 - —
bgs., l.c.l., same basis 100 lbs. 8.35 - 9.40
Dibasic, duohydrate, bgs., c.l., frt. equald 100 lbs. 7.60 - —
bgs., l.c.l., same basis 100 lbs. 8.10 - —
USP, dried, powd., bgs., dms., works lb. .19 - .20½
Monobasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l., same basis 100 lbs 9.40 -10.00
Tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 9.00 - —
bgs., l.c.l. frt. equald 100 lbs 9.45 -10.05
cryst., bgs., c.l., t.l. frt. equald 100 lbs 4.60 - —
bgs., l.c.l., frt. equald 100 lbs. 5.00 - 5.75
Sodium phosphate in dms. 60c to 80c. higher than bgs.
Sodium picramate, tech. paste, dms., f.o.b., works, frt. equald lb. .90 - —
Sodium prussiate, yellow (see Sodium ferrocyanide).

Sodium pyrophosphate acid, bgs., c.l., works, frt. equald, 100 lbs. 11.10 - —
bgs., l.c.l., same basis 100 lbs. 11.85 -12.35
Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
dms., l.c.l., works lb. .37 - .39
Sodium pyrophosphate tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs 7.81 - —
bgs., l.c.l., same basis 100 lbs 9.21 9.71
Sodium salicylate, USP dms., 1,000-lbs. or more lb. .78½- —
dms., less than 1,000 lbs dms lb. .81½- —
Sodium sesquicarbonate, bgs., c.l., works 100 lbs 2.35 - —
bgs., l.c.l., dlvd. zone 1 100 lbs 4.10 4.35
dlvd. zone 2 100 lbs 4.35 4.60
dlvd. zone 3 100 lbs 4.75 4.90
dlvd zone 4 100 lbs 5.35 5.60
Sales zones are: (1) All states E. of Miss., R and N of south bound of Ky. and Va., Ala., La., and Miss., south of 31°; Tex. E. of 100°; S. of 31° Fla.; also Me., N. H. and Vt. in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 93° Ga.; Iowa (except Davenport) Minn. Mo. (except St. Louis) Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98° N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.

Sodium sesquisilicate, anhyd., bgs. c.l., t.l., works 100 lbs 5.70 - —
dms., c.l., t.l., works 100 lbs 6.20 - —
Hydrated, bgs., c.l., works 100 lbs. 5.00 - —
bgs., 6,000-19,900 lb lots works 100 lbs 5.35 —
dms., c.l., works 100 lbs 5.50 - —
dms., 6,000-19,900 lb. lots, works, 100 lbs. 5.35 - —
Sodium silicate, liq., 40° Be. 1:3.2, turbid, dms., c.l., works 100 lbs. 1.65 - —
dms. l.c.l., works 100 lbs 1.90 2.40
tanks, works 100 lbs 1.20 —
47° Be., 1:29.9, turbid, dms., c.l., works 100 lbs. 2.25 - —
dms., l.c.l., works 100 lbs 2.60 3.45
tanks, works 100 lbs 1.90 —
52° Be., 1:2.4, turbid, dms., c.l., works 100 lbs. 2.65 - —
dms. l.c.l., works 100 lbs 3.00 3.50
tanks, works 100 lbs 2.50 —
Solid, 1:3.2, bgs., works ton 67.50 - —
Sodium silicofluoride, bgs., c.l., works lb. .055 - —
bgs., l.c.l., works lb. .725 - —
Sodium silicofluoride in dms. 0.4c. per lb higher
Sodium stannate, dms., works, frt. alld. E lb. .628 - .638
Sodium sulfa drugs (see Sulfa name).
Sodium sulfanilate, bbls., works lb. .22 - —



SPECIFY PENOLA SOLVENTS for greater efficiency in processing and better end products.

- Penola Solvents are of maximum purity!
- The purity of Penola Solvents is carefully guarded from the refinery to you.
- Penola Solvents are backed by the nation's largest petroleum research laboratory and refining facilities... sold by one of the oldest marketers in the U. S.

The Penola name is your guarantee of...

- **QUALITY**
- **TECHNICAL ASSISTANCE**
- **PURITY**
- **FAST DELIVERY**

For information or ordering, just contact your nearest Penola office or write . . . Penola Oil Company, 15 W. 51st St., New York 19, N. Y.

PENOLA OIL COMPANY NEW YORK • DETROIT • CHICAGO **Penola**

Sodium sulfate, NF VII, dried, powd., dms lb .22½- —
Tech., anhyd., bgs., c.l., dlvd. E. ton 54.00 - —
Tech., detergent, rayon grade, bgs., c.l., works ton 36.00 - —
bulk c.l. works ton 32.00 - —
USP, cryst., fib dms lb .17½- .18
Sodium sulfhydrate, flake, 70-72%, dms., c.l., works frt equald. lb .07¼- —
dms., l.c.l., same basis lb .08¼- —
Liq., 40-44% tanks, works, 100% basis ton 130.00 - —
Sodium sulfide, flake, dms., c.l., works, E., frt equald lb .06 - —
dms, l.c.l., same basis lb .07 - —
Fused, bbls., c.l., works, E., frt, equald lb .05½- —
bbls, l.c.l., same basis lb .06½- —
Sodium sulfite anhyd., bgs., c.l. works 100 lbs 7.55 - —
bgs, l.c.l., same basis 100 lbs 7.95 - —
Tech., bgs., c.l., works 100 lbs 3.00 - —
bgs, l.c.l., same basis 100 lbs 4.00 - —
Sodium sulfocyanide CP (see Sodium thiocyanate)
Sodium tetraborate (see Borax)
Sodium tetrasulfide, liq., 40% dms., c.l., works, frt equald lb .04½- —
dms., l.c.l., same basis lb .05½- —
Sodium thiocyanate, CP, dms lb .55 .65
Tech, anhyd, dms., 1 ton lots or more works lb .317 - —
dms, less than ton lots works lb .337 - —
Sodium thiosulfate, NF cryst bbls, lb .13½- —
Tech., anhyd., 100-lb. bgs., c.l., t.l., frt, equald 100 lbs. 7.75 - —
100-lb bgs., l.c.l., l.t.l., frt, equald 100 lbs. 8.15 - —
Tech., anhyd., photo grade, 64-lb. bgs., c.l., t.l., frt, equald, lb. .0775- —
64-lb bgs., l.c.l., l.t.l., frt, equald lb. .0815- —
Tech., pentahydrate, photo grade, 100-lb. bgs., c.l., t.l., frt, equald 100 lbs. 4.95 - —
100-lb. bgs, l.c.l., l.t.l., frt, equald 100 lbs. 5.20 - —
Sodium titanate, ctns, c.l., works, lb. .14¼- —
ctns., 5-ton lots, works lb. .14½- —
ctns, 1-ton or less, works lb. .14¾- —
Sodium trichloroacetate, 94%, 100-lb dms., c.l., frt alld E, lb. .35 - —
50-lb dms, c.l., frt alld E lb .35½- —
10-lb cns., c.l., frt alld E lb .42 - —
Prices on Sodium trichloroacetate W of the Rockies are 1¾c per pound higher
Sodium tripolyphosphate, bgs, c.l., works, frt equald 100 lbs 8.16 —
bgs, l.c.l., same basis 100 lbs 8.56 9.06
Sodium trisilicate, powd, 1:3.2 bgs., c.l., works 100 lbs 8.95 —
bgs., l.c.l. works 100 lbs 9.70 13.13
dms, c.l., works 100 lbs 9.45 —
dms., l.c.l. works 100 lbs. 10.20 10.60
Sodium tungstate, tech, kgs dlvd, E lb. 1.09 - —
Sodium-ammonium phosphate, purif., cryst., dms., works lb .52 —
Sodium carboxymethyl cellulose (see CMC).
Sodium cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 —
dms, l.c.l. same basis lb. .21½- —
Sodium-zirconyl sulfate, fib. dms., 1,000-lb lots or more works lb. .28 - —
fib., dms., smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar high-flash, tanks, frt equald gal. .30 - .35½
Solvent naphtha, petroleum, straight aromatic, 310°F-360°F b.r., 14°-16°C. m.a.p., tankcars, New Jersey and New York gal. .31 - —
Houston, Texas gal. .29 - —
Solvent naphtha, petroleum, partial aromatic, 355°F-420°F b.r., 17°-18°C. m.a.p., tankcars, New Jersey and New York gal. .32 - —
Houston, Texas gal. .30 - —
Solvent naphtha, petroleum, partial aromatic, 211°F-265°F b.r., 31°C. m.a.p., tankcars New Jersey and New York gal. .235 - —
286°F-340°F b.r., 22°C m.a.p., tankcars New Jersey and New York gal. .275 - —
319°F-380°F b.r., 27°C m.a.p., tankcars, New Jersey and New York gal. .285 - —
322°F-395°F b.r., 28°C. m.a.p., tankcars, New Jersey and New York gal. .295 - —
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .35 - —
fib dms, smaller lots works lb. .38 - .40
Sorbitan tristearate, fib dms., 20,000-lb lots works lb. .34 - —
fib dms., 10,000 to 20,000-lb. lots, works lb. .36 - —
fib dms, smaller lots works lb. .39 - .41
Sorbitol, NF, reg., 70% aqueous, dms., c.l., works lb. .18 - —
dms., l.c.l., works lb. .19 - —
tanks, works lb. .16¼- —
Resin grade, cryst., pellets, dms., c.l., works lb. .23 - —
dms., 1 to 5-ton lots, works, lb. .25 - .26
Powd, dms, c.l., works lb. .36 - —
dms, 1 to 5-ton lots, works, lb. .38 - .39
Soln., coml., aqueous, dms., c.l., works lb. .24¼- —
dms., ton lots, works lb. .25 - —
dms., smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
Soya protein, chemically isolated, old process, bgs., c.l., works, lb. .23 - —
bgs., l.c.l., works lb. .23¼- .23½
Chemically isolated, new process, bgs., c.l. works lb. .20 - —
bgs., l.c.l., works lb. .20¼- .20½
Soybean meal, 44%, bulk, unrestricted, Decatur ton. 59.00 —
Soybean oil, crude, tanks, Decatur, lb. .07⅞- —
Foots, soapstock, acid 85%, tanks, N. Y. lb. .04¾- —
Refd., alkali, dms, lb. .1193- .1215
tanks lb. .0993- —
clarified, dms, lb. .1143- .1165
tanks lb. .0943- —
salad, dms, lb. .1170- .1200
tanks lb. .0970- —
Soybean oil acids, dbl. dist., dms., lb. .18 - .20½
tanks lb. .15½- —
S. D., dms lb. .16¾- .19¼
tanks lb. .14¼- —
Sparteine sulfate, ens. oz. .80 —
Spearmint leaves, dom., bls. lb .75 —
Spearmint oil, NF, dms lb. 9.00 -11.25
Sperm oil, bleached, winter, 45°, dms lb. .1375- .1475
tanks lb. .1175- —
Nat., winter, 45°, dms lb. .1275- .1375
tanks lb. .1075- —

Spermaceti wax, blocks, cs. lb. .31 - .33
Cakes, cs. lb. .32 - .34
Spruce oil, crns., dms. lb 2.10 3.55
Squill, white, bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread, edible, bls. lb. .17 - —
Stannic chloride, anhyd., dms., works lb. .798 - .810
Stannic oxide, dms., dlvd. lb. 1.06 - 1.07
Stannous chloride, anhyd., dms., works lb. .929 - 1.244
Hydrous, cryst., dms., works lb. .855 - .865
Stannous sulfate, dms., works lb. 1.044 - 1.064
Star root (see Helonias root).
Stargrass root (see Aletris root).
Stavesacre seed, bgs lb .60 61
Stearic acid, dbl., pressed bgs lb. .16¼- .18¾
Single-pressed bgs. lb. .15¾- .18¼
Triple-pressed, bgs. lb. .18 - .20½
Stearine, oleo (see Oleostearine)
Stoddard solvent, petroleum tanks, east coast, New Jersey, New York gal. .18 - —
tanks, Houston gal. .1475- —
tanks, group 3 gal. .12675- —
Stramonium leaves, bgs lb. .15 - —
Streptomycin hydrochloride, bulk, gram. .04 - .041
Streptomycin sulfate, bulk gram. .04 - .041
Strontium bromide, NF, cryst., 100-lb. dm., f.o.b. E lb. .92 - —
Strontium carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
dms., 1-ton lots, works lb. .37 - —
Tech., dms., works lb. .19 - —
Strontium chromate, fib dms, dlvd, lb. .48 - —
Strontium iodide, jars, 25-lb lots lb. 3.57 - —
Strontium nitrate, bgs., c.l., works 100 lbs 11.00 - —
bgs., l.c.l., works 100 lbs. 12.00 - —
Strontium salicylate, NF, dms. lb 1.88 - —
Strontium sulfate, air floated, 90%, 325 mesh, bgs., works ton 56.70 -66.15
Strophanthin G (see Ouabain, USP)
Strophanthin K, bots oz. 25.00 -25.50
Strophanthus seed, Kombi, biologically tested, bgs lb 3.50 3.75
Styrax gum, USP, cs lb. 4.50 - 5.50
Styrene monomer, polymer grade, 99.6% dms, c.l. frt alld, lb. .17 - —
dms., c.l., same basis lb. .19 - —
tanks, same basis lb. .14½- —
Tech., 99.2%, dms., c.l. .1458- —
dms., l.c.l., same basis lb. .1658- —
tanks, bulk, same basis lb. .1208- —
Above prices are escalated for each calendar quarter on the basis of cost of crude oil at the well, cost of petroleum refining labor, and prices in the three major sections of the Wholesale Commodity Price index.
Styrolyl acetate, bots. lb 1.25 - 1.45
Succinic acid, purif., cryst., bbls., works lb. .62 - .75
Sucrose, refd., white, bgs, refy E, lb. .0955- —
Sucrose octa-acetate, denaturing grade, 100-200-lb. lots, bgs., l.c.l. works lb. 1.00 - —
Sugar (see Sucrose)
Sugar cane wax, dom., refd., slabs, 80-lb ctns works lb. .60 - .65
80-lb ctns., spot lb. .65 - .75
Sulfabenzamide, dms kilo 8.80 9.90
Sulfabenzamide-sodium, dms. kilo 9.00 10.10
Sulfacetamide, USP, fib dms kilo 6.61 6.83
Sulfacetamide-sodium, USP, fib. dms kilo 8.15 9.25
Sulfadiazine, USP, microcrystals, dms kilo. 23.35 -24.45
USP powd. dms. kilo 22.60 -23.70
Sulfadiazine-sodium, USP dms kilo. 24.80 25.90
Sulfaguanidine, NF X, dms kilo 5.50 6.60
dms kilo 23.50 -24.60
Sulfamerazine-sodium, USP, powd., dms kilo. 24.80 -25.90
Sulfamethazine, USP XV, microcrystals, dms kilo. 19.65 -20.75
USP XV, powd., dms kilo. 18.75 -19.85
Sulfamic acid, cryst, dms., c.l., t.l., works 100 lbs. 16.00 —
dms, l.c.l., t.l., works 100 lbs. 17.50 -18.50
Gran., dms, c.l., t.l., works 100 lbs. 14.75 —
dms, l.c.l. t.l., works 100 lbs. 16.25 -17.25
Sulfanilamide, NF X, 30-80 mesh, dms kilo 3.05 3.50
NF X, microcrystals, dms. kilo 3.79 4.20
NF X, powd., dms kilo 2.85 3.30
Sulfanilamide quinoxaline, veterinary dms kilo. 16.28 - —
Sulfanilic acid, tech, dms, c.l., frt, alld lb. .21 - —
dms, l.c.l., frt alld lb. .23 - —
Sulfapyridine USP XV powd. bots, tins kilo 15.45 -16.55
Sulfapyridine-sodium, monohydrate, dms kilo 16.55 -17.65
Sulfathiazole, NF X, microcrystals, dms kilo 6.25 6.60
NF X, powd., dms. kilo 5.50 5.85
Sulfathiazole-sodium, NF X, dms., 1,000 lb lots or more lb 2.35 - —
Sulfur, coml., flour, bgs., mines, 100 lbs 2.35 - —
bbls, mines 100 lbs 3.30 - —
lump, bgs., mines 100 lbs 2.25 - —
bbls, mines 100 lbs 2.80 - —
Sulfur, crude, dom., bright, bulk, f.o.b. cars, mines long-ton 23.50 - —
Sulfur, crude, export, f.o.b. vessels, Gulf ports, long-ton 25.00 - —
US and Canada f.o.b. vessels Gulf ports long-ton 25.00 - —
Domestic dark sulfur prices are $1 per long-ton lower
Sulfur, crude, imp., bulk, Mexican, filtered, f.o.b. vessel, Coatzacoalcos long-ton 24.00 - —
Mexican dark sulfur price is $1 per long-ton lower
Sulfur, refd., flowers, NF, bgs., mines 100 lbs 5.65 - —
bbls., mines 100 lbs. 7.00 - —
flour, light, bgs., mines 100 lbs. 5.25 - —
bbls., mines 100 lbs. 6.25 - —
lump, bgs., mines 100 lbs. 4.95 - —
rolls, bgs., mines 100 lbs. 5.50 - —
bbls., mines 100 lbs. 6.25 - —
salt block, bgs., mines 100 lbs. 4.65 - —
virgin block, bbls., mines 100 lbs. 4.70 - —
Sulfur, rubbermakers, coml., reg., bgs., mines 100 lbs 2.45 - —
bbls, mines 100 lbs 3.70 - —
98-100%, passing through 325 mesh, bgs, mines 100 lbs 2.55 - —
bbls., mines 100 lbs 3.80 - —
refd., bgs., mines 100 lbs 4.90 - —
bbls., mines 100 lbs 6.05 - —
treated, 2.5% mineral oil, bgs., mines 100 lbs 2.75 - —
bbls., mines 100 lbs 4.00 - —

Sulfur dichloride, ret, dms., c.l., works, frt equald lb. .04½- —
ret dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfur dioxide, liq., coml., cyls., works, frt equald lb. .10 - .12
multi-unit cars, works lb. .0535- —
tanks, works lb. .045 - —
Sulfur dioxide, refrigeration, cyls., dlvd lb. .33 - —
Sulfur monochloride, 55-gal. non-ret. dms, c.l. frt equald lb. .04¼- —
dms., l.c.l., same basis lb. .05¼- —
tanks, same basis lb. .04 - —
Sulfuric acid, 60° Be, cbys., c.l., works 100 lbs 2.00 - —
cbys., l.c.l., works 100 lbs 2.30 - —
tanks, works ton 18.00 - —
66° Be, cbys, c.l. works 100 lbs 2.25 - —
cbys., l.c.l., works 100 lbs 2.55 - 3.35
tanks, works ton 22.35 - —
Sulfuric acid, 98%, tanks, works, ton 23.50 - —
99% tanks, works ton 23.70 - —
100% tanks, works ton 23.95 - —
CP, NF, consumers' cbys., c.l., frt, equald lb. .12¾- —
consumers' cbys., l.c.l., same basis lb. .14¼- .14¾
5-pt bots, extra es., c.l. works, frt alld lb. .16¼- —
5-pt bots, extra es, l.c.l. same basis lb .17¾ .23¾
Sulfuric acid, fuming (oleum), 20%, tanks, works ton 25.06 - —
40%, tanks, works ton 29.00 - —
65%, tanks, works ton 39.50 - —
Superphosphate, run-of-pile, under 22% a.p.a., pulv., bulk, c.l., Baltimore unit-ton. .90 - .93
bulk, c.l., Carteret, N. J. unit-ton. .90 - .93
bulk, f.o.b. vessel unit-ton 1.02 - —
Superphosphate, triple 48% or more a.p.a., pulv., bulk, c.l., East Tampa, Fla unit-ton .98 - —
Sweet birch oil, USP, northern, ens lb 4.00 9.50
USP, southern, ens. lb 2.00 3.05

T

2,4,5-T, dms, c.l. works, frt equald, lb 1.18 - —
dms, l.c.l. same basis lb 1.25 - —
2,4,5-T isopropyl ester, dms., c.l., works, frt equald lb 1.24 - —
dms., l.c.l. works lb 1.29 - —
Talc, dom., fibrous New York, grd., bgs, c.l., works ton 28.00 - —
bgs., l.c.l., works ton 31.00 -36.00
fibrous, New York, 99.5% 325 mesh, bgs, c.l., works ton 31.00 - —
bgs, l.c.l., works ton 34.00 - —
fibrous, 99.95%, 400 mesh, micronized bgs., c.l., works, ton 38.00 - —
625 mesh, micronized, bgs., c.l. works ton 80.00 - —
ord., Calif., gran., bgs., c.l., works ton 34.00 -39.50
Vermont, off-color grd., bgs., c.l., works ton 19.40 - —
bgs., l.c.l., works ton 37.00 - —
Imp., Canadian, grd, bgs., c.l., mines ton 20.00 -35.00
Tall oil, crude, dms., c.l., works lb. .04¼- .04½
tanks, works lb. .02¾- .02⅞
Dist., dms., c.l., works lb. .07¾- —
dms., l.c.l., works lb. .08 .08½
tanks, works lb. .05¾- .06¼
Refd., dms., c.l., works lb. .07½- —
dms., l.c.l., works lb. .07¾- .08
tanks, works lb. .05½- .06¼
Tall oil acids, dms., c.l., works lb. .08¼ .11¾
dms., l.c.l. lb. .08¾- .12¼
tanks, works lb. .06½- .09¾
Tallow, edible, tanks, dlvd lb. .08⅜- .08¾
Inedible, fancy, bleachable, tanks, lb. .06 - .06⅛
fancy, guaranteed, dms., t.a.s. lb. .07¾- .0780
No. 1, tanks, dlvd lb. .04¾- .04⅞
prime, tanks, dlvd lb. .03¾- .05⅞
special tanks, dlvd lb. .05¼- .05⅜
sulfonated, 25%, bbls., l.c.l. lb. .08½- .08¾
50% bbls., l.c.l lb. .10½- .11
Tallow acids, dist., dms lb. .14¼- .16¾
tanks lb. .11¾- —
Hydrogenated, dms lb. .15¾- 18¼
Tallow oil, acidless, dms, c.l. lb. .13½ Nom.
dms., l.c.l. lb. .14½- .16
Tangerine oil, Florida, dms. lb. 3.10 4.00
Tankage, animal, feeding, 9-11% ammonia, New York bulk, unit-ton. 4.50 - —
Animal, feeding, 9-11% ammonia, Chicago bulk, unit-ton. 5.00 - —
Tannic acid, NF, fluffy bbls, 1,000-lb lots lb 2.05 - —
bbls., smaller lots lb 2.06 - 2.07
NF, powd., bbls., 1,000-lb. lots lb. 1.95 - —
bbls., smaller lots lb 1.96 - 1.99
Tech, dms lb 1.05 - —
Tansy oil, dms lb. 7.25 - 7.50
Tar acid oil, 15-18%, dms., c.l., frt, equald gal. .53½- —
dms., l.c.l., same basis gal. .55½- —
tanks, same basis gal. .43½- —
25-28%, dms., c.l., same basis gal. .60 - —
dms., l.c.l., same basis gal. .62 - —
tanks, same basis gal. .50 - —
50-53%, dms., c.l., same basis gal. .75 - —
dms., l.c.l., same basis gal. .77 - —
tanks, same basis gal. .65 - —
Tar, coal (see Coaltar)
Tartar emetic (see Antimony potassium tartrate)
Tartaric acid, NF, 100-lb bgs., c.l., frt, equald lb. .41 - —
bgs., 10,000 lbs., 1 shipt., same basis lb. .43 - —
bgs, smaller lots, same basis lb. .47 - —
Terpine hydrate, NF, cryst., powd., 100-lb fib dms lb. .70 - —
Terpineol, extra, dms. lb. .50 - .60
Prime, dms. lb. .40 - .50
Terpinyl acetate, extra, ens., dms. lb. .64 - .75
Prime, dms. lb. .53 - .56
Terpinyl propionate, dms. lb. 1.75 - 3.00
Terra alba (see Gypsum).
Testosterone, USP, bots. gram. No prices.
Testosterone proprionate, USP, bots. gram. No prices.
Tetrachloroethane, dms. works lb .14½ —
Tetrasodium pyrophosphate (see Sodium pyrophosphate)
Tetrachloroethylene, tech (see Perchloroethylene).
Tetrachloroethylene, USP, 55-gal. dms., c.l., t.l., works lb. .20½- —
dms., l.c.l., works lb. .22 - .23½
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .60 - —
dms, l.c.l., dlvd E lb. .61½- —
Tetraethyl pyrophosphate, 40%, cns., dms, frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .53½- —
dms., l.c.l., dlvd. E. lb. .55 - —
tanks, dlvd E lb. .51 - —
Tetraethylthiuram disulfide, tech., dms., frt alld lb. 1.04 - —
Tetrahydrofuran, dms., c.l., t.l., works lb. .36½- —
dms., l.c.l., or l.t.l., works lb. .37 - —
tanks, works lb. .35 - —

Tetrahydrofurfuryl alcohol, dms., c.l., t.l., Memphis, Tenn. lb. .31½- —
dms., l.c.l., Memphis, Tenn lb. .32½- —
dms., c.l., t.l., Newark, N.J lb. .33½- —
dms., l.c.l., Newark, N.J lb. .34½- —
tanks, dlvd E. of Denver lb. .31 - —
tanks, dlvd. W of Denver lb. .32 - —
Tetrapotassium phosphate (see potassium phosphate).
Thallium metal, dlvd. lb. 7.50 -10.00
Thallium sulfate, 99% bots., dlvd. lb 5.00 -10.00
Theobromine, NF, fib. dms lb. 4.50 - —
Theobromine and sodium acetate, USP, fib dms lb. 4.75 - —
Theobromine sodio-salicylate, NF, fib dms lb. 3.90 - —
Theophyline, USP, anhyd., 100-lb. dms., frt. alld lb. 3.65 - —
Thiamine hydrochloride, USP, fib. dms., frt. alld kilo. 36.00 - —
USP, ampule grade, fib. dms., frt. alld kilo. 28.00 - —
Thiamine mononitrate, USP, fib dms., frt. alld kilo. 36.00 - —
Thiocarbanilide, dms., ton lots lb 72 - —
dms., less ton lots lb 74 - —
Thiodiphenylamine (see Phenothiazine).
Thiodiavin green toner, brilliant, molybdated, PMA, bgs., works lb. 5.20 - —
Tungstated, PTMA, bgs., works, lb. 6.20 - —
Thioglycolic acid, refd., cbys., 100% basis lb. 1.35 - 1.55
Thiosalicylic acid, purif., dms., 1,000-lb., lots, works lb 4.00 - —
Thiourea, tech., bgs., t.l. frt alld, lb. .30 - —
bgs., ton lots, same basis lb. .32 - —
bgs., less than ton lots, same basis lb. .33 - —
Thorium nitrate, purif., fib dms., 100-lb lots or more, works lb 3.50 - —
dl-Threonine bots., 1-kilo lots, kilo 275.00 - —
Thyme leaves, French, bgs lb 29 - —
Spanish, bgs. lb .14 - —
Thyme oil, NF, red, ens., dms. lb. 1.90 - 2.25
Tech, white, ens. lb .40 1.85
USP, white, ens. lb 2.20 2.60
Thymol, fib dms lb 2.60 3.00
Thymol iodide, NF, dms. lb. 7.30 - —
Timbo root (see Cube root).
Tin chloride (see Stannous chloride, anhyd.).
Tin crystals (see Stannous chloride, hydrous)
Tin metal (Straits) lb. .99 - —
Tin oxide (see Stannic oxide)
Tin sulfate (see Stannous sulfate).
Tin tetrachloride anhyd (see Stannic chloride anhyd.).
Titanium dioxide, anatase, ceramic, bgs., c.l., dlvd lb. .25½- —
bgs., l.c.l., dlvd lb. .26½- —
reg., bgs., c.l., dlvd lb. .25½- —
bgs, l.c.l., dlvd lb. .26½- —
metallurgical, nat., bgs., c.l., f.o.b. Jacksonville, Fla ton. 180.00 - —
bgs., 5-ton lots, Niagara, Falls, N.Y ton. 205.00 - —
bgs., ton lots same basis, ton. 215.00 - —
Milled metallurgical titanium dioxide $7.50 per ton higher.
Titanium dioxide, rutile, non-chalking, bgs., c.l., dlvd, E lb. .27½- —
bgs., l.c.l., dlvd, E lb. .28½- —
Titanium dioxide-calcium pigment, 30% Ti O_2, reg., bgs., c.l., dlvd lb. .09¾- —
bgs, l.c.l., works lb. .09½- —
50% Ti O_2, high-tinting, dms, c.l. lb. .14¾- —
dms., l.c.l lb. .14⅞- —
Titanium hydride, powd., dms., works lb. 8.10 9.00
Titanium tetrachloride, tech., dms., c.l., works lb. .26 - —
dms., l.c.l., works lb. .27½- .29
tanks, works lb. .20 - —
Tobias acid, dms., c.l., t.l. lb. .78 - —
dms., l.c.l. lb. .81 - —
d-a-Tocopherols, NF, mixer, conc., pure basis, bots kilo. 67.00 - —
d-a-Tocopheryl acetate, NF, conc., pure basis, bots kilo. 122.00 - —
d-a-Tocopheryl acid succinate, cryst., bots kilo 109.00 - —
dl-a-Tocopherol, bots kilo. 99.00 - —
dl-a-Tocopheryl acetate bots. kilo. 90.00 - —
25% dry, powd., bots. kilo. 22.50 -24.00
33% dry, powd., bots. kilo. 30.00 -31.50
o-Tolidine base, dry, kgs., 100% basis lb 1.55 - —
Paste, kgs, 100% basis lb 1.50 - —

TOLUOL

Toluol quotations, both coaltar and petroleum, may be found under Toluene.

o-Tolidine hydrochloride, paste, kgs., 100% basis lb. 1.50 - —
Tolu balsam, ens lb. 3.50 - —
Toluene, coaltar, indust. or nitration tanks, dlvd. E. of Rockies gal. .25 - —
Toluene, petroleum indust., tanks, dlvd E. of Rockies gal. .25 - .32
p-Toluenesulfonamide, powd., dms., t.l., works lb. .60 - —
dms., l.t.l., same basis lb. .63 - —
Toluenesulfonic acid, dms., c.l., t.l., works lb. .17 - —
dms, l.c.l., works lb. .18 - —
p-Toluenesulfonic acid monohydrate, dms., c.l. or t.l. lb. .90 - —
dms., 125 lbs. to t.l. lb. 1.00 - —
m-Toluidine, dms., c.l., works, frt, alld lb. .79 - —
dms., l.c.l., same basis lb. .80 - —
tanks, same basis lb. .78 - —
o-Toluidine, dms., c.l., works, frt, alld lb. .30 - —
dms., l.c.l., same basis lb. .31 - —
tanks, same basis lb. .28 - —
p-Toluidine, tech., flake, dms., frt, alld lb. .50 - —
Cast, dms, frt alld lb. .45 - —
p-Toluidine-m-sulfonic acid, dms., works lb. .92 - 1.04
Toluidine red toner, deep shades, kgs., works lb. 1.70 - —
Light shades, kgs, works lb. 1.70 - —
2,4-Tolylenediamine, cryst., fib. dms., l.c.l., frt alld lb 1.10 - —
Tonka beans, Angostura, cks. lb. 1.50 - 1.60
Brazilian, Surinam, cs lb 1.25 - 1.30
Totaquine, 100-oz. lots, ens. oz. .42 - —
Toxaphene, dms., c.l., t.l., works, lb. .22 - —
dms, l.c.l., t.t.l., works lb. .28 - —
Tragacanth gum, No. 1, ribbons, cs lb. 3.60 - 3.75
No. 2, cs lb. 3.40 - 3.60
No. 3, cs lb. 3.15 - 3.25
USP, powd., bbls. lb. 1.05 - 1.15
Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 - —
dms., l.c.l., same basis lb. .40 - —
tanks, same basis lb. .37 - —
Triallylamine, dms., c.l., dlvd. lb. .985 - —
dms., l.c.l., dlvd. lb. .995 - —
tanks, dlvd. lb. .96 - —

Tributyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver, lb. .42½- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .43½- —
tanks, frt. alld. E. of Denver lb. .40 • —
Tributyl phosphate, dms., c.l., works, lb. .52½- —
dms., t.c.l., same basis. lb. .53½- —
tanks, same basis. lb. .50 • —
Tributylamine, dms., c.l., works lb. .67½- —
dms., t.c.l., same basis lb. .69 • —
tanks, same basis. lb. .65 • —
Trichloroacetic acid, bots. lb. 2.00 • 2.50
Trichlorobenzene, dms., c.l., frt. alld. E. lb. .15 • —
dms., t.c.l., frt. alld. E. lb. .16 • —
tanks, frt. alld. E. lb. .13¼- —
Trichlorobenzene prices 1c. higher in the West.
1,1,1-Trichloroethane, dms., c.l., dlvd. lb. .13¼- —
dms., t.c.l., dlvd. lb. .15¼- —
tanks, dlvd. lb. .12¼- —
1,1,2-Trichloroethane, dms., c.l., works. lb. .13½- —
dms., t.c.l., dlvd. E. lb. .14¼- —
tanks, works lb. .11½- —
Trichloroethylene, dms., c.l., or t.l., works, frt. equald lb. .13 • —
dms., t.c.l., frt. alld. lb. .15 • .16¾
tanks, works, frt. equald. lb .12 • —
Trichlorophenoxyacetic acid (see 2,4,5-T).
Tricholine citrate, 65% soln., ret. cbys., works, frt. adjusted, lb. 1.40 • 1.45
Tricresyl phosphate, coaltar, dms., c.l., dlvd lb. .35 • —
dms., t.c.l., dlvd. lb. .36 • —
tanks, dlvd. lb. .32½- —
Tricresyl phosphate, petroleum, dms., c.l., dlvd. lb. .34½- —
dms., t.c.l., dlvd. lb. .35½- —
tanks, dlvd. lb. .32½- —
Tridecyl alcohol, mixed isomers, dms., c.l., dlvd. E lb. .26½- —
dms., t.c.l., dlvd. E. lb. .28 • —
tanks, dlvd E lb. .24 • —
Triethanolamine dms., c.l., dlvd E. lb. .24½- —
dms., t.c.l., same basis lb. .26 • —
tanks, same basis lb. .22 • —
Triethanolamine lauryl sulfate, dms., c.l., t.l., frt. alld lb. .25½- —
dms., t.t.l., frt. alld. lb. .26½- —
tanks, frt. alld lb. .24½- —
Triethylamine, dms., c.l., dlvd. E. lb. .50 • —
dms., t.c.l., same basis lb. .51½- —
tanks, same basis lb. .47½- —
Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld E. of Denver lb. .46¼- —
non-ret. dms., t.c.l., frt. alld. E. of Denver lb. .47¼- —
tanks, frt. alld. E. of Denver lb. .43¾- —
Triethyl phosphate, dms., c.l., dlvd. lb. .40½- —
dms., t.c.l., dlvd. lb. .41½- —
tanks, dlvd. lb. .38 • —
Triethylene glycol, dms., c.l. dlvd. E lb. .21 • —
dms., t.c.l., dlvd. E. lb. .22½- —
tanks, same basis lb. .18½- —
Triethylenetetramine, dms., c.l., dlvd. E lb. .51½- —
dms., t.c.l., dlvd. E. lb. .53 • —
tanks, dlvd E. lb. .49 • —
Tri-isopropanolamine, dms., c.l., dlvd. E lb. .23¼- —
dms., t.c.l., dlvd E. lb. .24¾- —
tanks, dlvd. E. lb. .20¾- —
Trimethylamine, anhyd., cyls., t.c.l., frt. equald, 100% basis lb. .30 • .305
tanks, same basis lb. .26 • —
basis lb. .26 • —
25-40% soln., dms., c.l., works, frt. equald, 100% basis lb. .33 • —
dms., t.c.l., works, frt. equald., 100% basis lb. .35½- —
tanks, works frt equald, 100% lb. .50 • —
Trimethylolpropane, dms., c.l., t.l., dlvd. E lb. .35 • —
dms., t.c.l., t.t.l., same basis lb. .36 • —
Trioxane, pure, dms., c.l., t.l., works. lb. .50 • —
dms., t.c.l., works lb. .51½- —
Tripentaerythritol, c.l., t.l., dlvd. E. lb. .40 • —
bgs., t.c.l., t.t.l., dlvd E. lb. .41 • —
Triphenyl phosphate, bbls., c.l., frt equald lb. .41½- —
bbls., t.c.l. frt. equald lb. .43½- —
Triphenylguanidine, bbls., works lb. .90 • —
Tripropylene glycol dms., c.l., t.l., frt. alld. E lb. .20½- —
dms., t.c.l., t.t.l., frt. alld. E lb. .22 • —
tankcars and compartmented tankcars, frt. alld. E. lb. .17½- —
Tripropylene glycol, tankwagons and compartmented tankwagons, 1,000 gals. min., frt. alld E. lb. .18 • —
Tripropylene glycol prices 1c. per lb. higher in West.
Trisodium phosphate (see Sodium phosphate tribasic).
dl-Tryptophane, fib., dms., works. lb. 55.00 • —
Tung oil, dms., c.l., New York lb. .23¾- —
dms., t.c.l., New York lb. .24¼- .24½
tanks, New York lb. .22¼- —
tanks, domestic, mills lb. .21½ Nom.
Tungsten metal, powd., 2.0-2.5 microns, dms., works lb. 3.54 • —
Tungstic acid, tech., dms., 1,000-lb. lots, works lb. 2.25 • —
dms., smaller lots, works lb. 2.45 • —
Turkey red, bbls. works lb. .62 • —
Turpentine, gum (see Protective Coatings market, Naval Stores).
Turpentine oil, NF, cns, dms lb. .28 • .50
Tuscan red, bbls, frt. equald lb. .26 • .32
Tyrothricin, USP, 1 to 5 kilos gram. .54 • —

U

Ultramarine blue, cobalt type, dry or pulp, 250-lb. bbls., dlvd. E. of Rockies lb. .35 • .39½
Jobbing types, bbls., same basis lb. .19 • —
Regular types, dry bbls., same basis lb. .22½- .25
Ultramarine blue prices 1c. higher W. of Rockies.
Umber pigment, burnt, American, bgs., c.l., works lb. .07½- .07¾
bgs., t.c.l., works lb. .07¾- .08
Turkey-type, bgs., c.l., Boston, Bethlehem, Easton, Pa., Hiwassee, Va., N. Y. lb. .08¼- —
Raw, American, bgs., works lb. .07¾- .08¼
Turkey-type, bgs., works lb. .08½- .08¾
Undecylenic acid, dms lb. 1.28 • —
Unicorn root, false (see Helonias root).
Unicorn root, true (see Aletris root).
Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton. 125.00 • —
bgs., t.c.l., dlvd. E. ex whse. ton. 145.00 • —
45% N, agricultural, bgs., c.l., (30 tons) dlvd. E ton. 103.00 • —
Urea-ammonia liquor, A, B, C & F grades, N basis, tanks, frt. equald. ton. 120.00 • —
37 grade, tanks same basis ton. 145.00 • —
Urethane, USP, dms., t.l., f.o.b., works lb. .65 • —
dms., t.t.l., same basis lb. .70 • —
Uva-ursi leaves, bls. lb. .12 • —

V

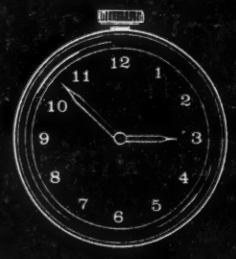
Valerian root, Belgian, bgs. lb. .32 • —
Indian, bgs. lb. .25 • —
dl-Valine, dms., works lb. 21.00 • 27.50
Vanadium pentoxide, tech., dms., works lb. 1.28 • 1.33
Vandyke brown, bbls., works lb. .09½- .12
Vanilla beans, Bourbon, tins lb. 15.00 • —
Mexican cuts, tins lb. 15.00 • —
whole, tins lb. 15.50 • —
Vanillin, ex lignin, 100-lb fib. dms., 1,000-lb. lots or more lb. 3.00 • —
100-lb fib. dms., 500-lb. lots lb. 3.10 • —
100-lb. fib. dms., cns., 100-lb. lots lb. 3.25 • 3.35
Venetian red, jobbing, bgs., works. lb. .0475- —
Venetian red, 20%, bgs., works lb. .0525- —
25%, bgs., works lb. .0575- —
30%, bgs., works lb. .06 • —
35%, bgs., works lb. .0625- —
40%, bgs., works lb .0675- —
Vetiver oil, Bourbon, cns lb. 16.00 • 16.50
Haitian, cns. lb. 14.00 • 15.50
Victoria blue toner, molybdated, PMA, 250-lb. bbls., dlvd. E. of Rockies lb. 4.50 • —
Tungstated, PTA, 250-lb. bbls., dlvd. E. of Rockies lb. 5.55 • —
Victoria blue toner, bbls., prices 1c. higher W. of Rockies.
Vinyl acetate monomer, zone 1, 55-gal. dms., c.l., dlvd lb. .20 • —
55-gal. dms., t.c.l., dlvd. lb. .21½- —
tanks, dlvd. lb. .17½- —
tanktrucks less than 4,000 gal., dlvd lb. .18 • —
Zone 2, 55-gal. dms., c.l., dlvd lb. .21 • —
55-gal. dms., t.c.l., dlvd. lb. .24 • —
tanks, dlvd. lb. .18½- —
Vinyl acetate, zone 2, tanktrucks, less than 4,000 gals., dlvd. lb. .19 • —
Zone 1 is all continental US except zone 2. zone 2 comprises Ariz., Calif., Idaho, Mont., Nev., Ore., Utah and Wash.
Vinyl n-butyl ether, tech., dms., t.c.l., works lb. .50 • —
Vinyl chloride monomer, tanks, works lb. .125 • —
Vinyl ether, USP, anesthesia, bots., 50cc., hospitals bot. 1.12 • —
bots., 75cc., hospitals bot. 1.56 • —
Vinyl ethyl ether, tech., dms., c.l., works lb. .29¼- —
dms., t.c.l., works lb. .30 • —
tanks, works lb. .27¼- —
Vinyl propionate monomer, dms., c.l., dlvd lb. .49 • —
dms., t.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —
Vinyl trichloride (see Trichloroethene).
2-Vinylpyridine, 10 dms. to tanks, works lb. 1.20 • —
1 to 9 dms., works lb. 1.35 • —
tanks, works lb. 1.15 • —
Vinyltoluene, dms., c.l., f.o.b., works. lb. .16½- —
dms., t.c.l., same basis lb. .18½- —
tanks, f.o.b., dest., frt. prepaid lb. .14 • —
Viosterol, in nat. vegetable oil, 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .02½- —
Virginia type red, bbls., works lb. 1.40 • —
Vitamin A acetate, syn., cryst., beads 500,000 A units per gram gram. .07¼- —
Vitamin A acetate, dry, 500,000 units per gram, kilo lots kilo. 65.00 • —
325,000 units per gram, same basis kilo 43.88 • —
250,000 units per gram, same basis kilo. 33 75 • —
Dry vitamin A acetate in less than kilo lots, $1.25 to $2.50 per kilo higher.
Vitamin A, liq. in oil, 1,000,000 A units per gram, 1,000,000 units. .09½- —
Vitamin A palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .09½- —
1,000,000 A units per gram, 1,000,000 units. 09½- —
Vitamin B_1 (see Thiamine hydrochloride).
Vitamin B_2 (see Riboflavin and Yeast).
Vitamin B_{12}, cryst., USP (cyanocobalamin), 1-50 grams, vials, tons gram. 120.00 • —
0.1% vitamin B_{12} USP, adsorbed on gelatin 100 and 500-gram bots, on 1-5 kilo dms. gram. 1.43 • —
0.1% vitamin B_{12}, USP, adsorbed on resin, 100 and 500-gram bots., 1-5 kilo dms. gram. 1.43 • —

—*Continued on page 67*

Another problem solved with

2-NITROPROPANE

PROBLEM:



To reduce pigment grinding time by getting better wetting of the hydrophilic pigments by vehicles.

SOLUTION:

2-NITROPROPANE (2-NP) is highly adsorbed on pigments — it will displace moisture. Only 1% of 2-NITROPROPANE (2-NP) based on the weight of the pigment is required. Also — it's volatile — can't weaken the film. Here are some of the results you can get:

1. Reduced grinding time.
2. Uniform color development with tinting pigments.
3. Improved weathering qualities.
4. No residual dispersing agent in the film.
5. Settled pigment remains fluffy — easily redispersed — no hard caking — no long stirring before use.
6. Lower cost than most dispersing agents.

A free 8-ounce sample is enough for a plant run. Write for the details today.

INDUSTRIAL CHEMICALS DEPARTMENT
COMMERCIAL SOLVENTS CORPORATION
260 MADISON AVE., NEW YORK 16, N.Y.
ATLANTA • BOSTON • CHICAGO • CINCINNATI • CLEVELAND • DETROIT • KANSAS CITY
LOS ANGELES • NEW ORLEANS • NEWARK • NEW YORK • ST. LOUIS • SAN FRANCISCO
IN CANADA: Macarthur Chemical Co. (1958) Ltd. Montreal • IN MEXICO: Comsolmex, S.A., Mexico 7, D.F.

Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

Founded October 18, 1871 by William O. Allison

Directed 1900-1942 by Harry J. Schnell

EDITOR AND PUBLISHER: William S. Auchincloss
ASSISTANT PUBLISHER: J. Stuart Auchincloss
MANAGING EDITOR: Arthur R. Kavaler
TECHNICAL EDITOR: Edwin M. Fisher
NEWS EDITOR: Gene Gasteiger

OPD SPECIAL REPORTS: Don L. Richards

MARKETS: Kathryn H. Auchincloss, Andrew C. Barchi, John L. Casey, James Gubitosi, Jacqueline Hudgins, Harvey McCormick, Harry Van

IMPORTS: Mary Van Grieff

CONSULTING EDITOR: Hugh Craig
WASHINGTON EDITOR: Ralph L. Cherry

SCHNELL PUBLISHING COMPANY, INC., 30 Church Street, New York 7, N. Y
(REctor 2-9820) Cable Address: Reporter, New York
PRESIDENT: William S. Auchincloss
VICE-PRESIDENT: Jean Schnell Auchincloss
TREASURER: William S. Auchincloss
ASSISTANT TREASURER: Ruth D. Johnson
SECRETARY: Anne L. Koch
ASSISTANT SECRETARIES: J. Stuart Auchincloss, Sara Jane Auchincloss

Copyright 1959 by Schnell Publishing Company, Inc.
Member of Audit Bureau of Circulations

Volume 176 December 21, 1959 No. 26

Drug Trade Pilloried

It is still anybody's guess as to what the Kefauver committee will do before it has finished with its probing of pricing practices in the drug trade. There is very much reason, however, to expect that what it does will not be easy on the trade. Next year will bring many congressional elections, and anything that can be made to look like even an attempt to reduce the cost of medicine for the people—voters—of the United States will be a strong bid for votes.

It must be most clear to the leaders of the drug trade that, in arriving at the confidence, based on the outcome of the polio vaccine price-fixing decision, with which they faced the Kefauver probe (as reported in OPD December 7), they failed to give adequate consideration to the pertinent fact that there is a very great difference in motivation between hearings by congressional groups and those by the courts. With the latter, it is justice; with the former, it is politics.

The drug trade leaders who have appeared in the Kefauver hearings have made a very good, strong case in the defense of the trade against the charges set up by the—not impartial—probers. They have been given equitable consideration in the reports and commentaries on the proceedings in the newspapers—at least in most of them, those which have a proper standing in ethics. But, the reading public, putting self-interest above ethics, cannot be expected to be equitable in its selection of what it wants to believe. The local druggists all over the land are getting to know more and more in that connection every day.

Whatever may be the outcome of the Kefauver hearings—probings is a more accurate designation—the pillorying of the drug trade is not going to be stopped when the probing is ended. It is going to have a big place in the politicking for re-election which will be getting under way about the same time. It will also have more than a little part in the big noise that is going to be made in the coming session of the federal lawmakers in promotion of statutory protection for those who must have medicines, against "price-chiseling."

The drug trade has a most important and very big job in public relations before it—and it is in a pillory.

Chemical Industry Grows

According to the Manufacturing Chemists' Association, the chemical industry in this country has got $3.3 billion more from sales this year than it got in 1958, and passed the 1957 peak by $1.6 billion. Profit margins were up 0.8 percent from that year's, reaching 8.4 percent. Particularly to be noted is the evidence therein that the chemical industry has not been inflationarily profiteering; general reports have had it that corporation profits have been going up 25 percent and more. A similar conclusion is logically to be drawn from the MCA data that the chemical wholesale price index was at 110 in October, compared with 110.2 a year earlier and 110.4 in 1957.

Employment in the industry over the first ten months averaged more than 2.4 percent above the 1958 average and was almost on a par with that in the "big" year of 1957.

The only factor in which there was what might be regarded as a reflection of the big cutting down of chemical markets in the iron and steel and automotive industries by the steel strike is presented in the figures showing that capital expenditures, totaling a billion and a quarter, were down almost 4 percent from those in 1958. They were still above the billion-dollar average for such promotion during the past decade.

The only sour note in the story of the growth of the chemical industry comes in the reaction of perplexed economists to the report that, because too much good promotion of fertilizers is being carried on, the national corn crop is getting farther and farther out of bounds. The chemical industry should undertake what really would not be a very difficult task—the developing of bigger and bigger uses for corn grains, cobs and stalks, especially the pith.

Safeguard the Economy

About a month from now, this country is going to be faced with a serious bipartite problem. For one thing, what will have to be done to clean up the mess in employment relations in the steel industry? For the other, what must be done to prevent similar serious disruptions of the national economy by the lack of efficient means of dealing with the private clashes between employers and employees?

Reports by the Federal Trade Commission and the Securities & Exchange Commission show that sales by manufacturing corporations dropped more than five billion dollars during the third quarter of the current year, and that earnings fell off one billion. The major contributions to the shrinkage were reported to have been made by slackenings more or less closely connected with the 58-percent decline in the business of the iron and steel industry.

It is far past the time that this country had an agency for dealing with labor disruptions on the basis of public responsibility. Whether such an agency should be a Presidential appointee, requiring congressional approval, or a creature of the Supreme Court, is an open question. Real public responsibility would demand that the agency be wholly disassociated, in creation and operation, from any potentiality of political influence.

The AFL-CIO president has "advised" congress against any "government tinkering" with collective bargaining. Public responsibility backs up that advice insofar as it has to do with "tinkering." But, it insists that the needs of all aspects of employment relations be dealt with in a manner that will assure their being fully and permanently corrected.

Washington Talks It Over

Robinson-Patman Law Due for Overhaul? Loopholes Need Plugging Up, Chemical People Hear, If Law Is to Serve Stated Purpose of Protecting Small Firms Against Price Squeeze.

By Ralph L. Cherry
Washington Editor

Chemical specialties manufacturers, drug suppliers and toiletries producers who have a keen interest in the Robinson-Patman law can expect some rather important developments in the legislative field concerning this law—if not next session then in the session following.

Brookings Institution has just issued an extensive study of the operations of the law, which finds that it contains many loopholes and undesirable features when measured from the standpoint that the purpose of the law is to protect small firms against price discrimination.

The study was prepared by one who is thoroughly acquainted with the law, Dr. Corwin D. Edwards, one-time director of economics of the Federal Trade Commission, and now economics professor of the University of Chicago. He holds that the law has only partly accomplished its purpose and can be described as a partial failure as well as a partial success.

Price discrimination sometimes can be a means of strengthening market competition as well as a means of reducing it, Dr. Edwards says, and he lists these four weaknesses in the law:

- Sellers alone are liable for violation of provisions concerning services and allowances, and partly for this reason there has been a tendency for powerful buyers to obtain immunity by seeking concessions in this form.
- The law now must be separately applied against each seller or buyer except where there is conspiracy and this has meant discrimination in enforcement. Some are subjected to orders while competitors are not.
- The law strikes at manifestations of power by big buyers rather than the power itself. A seller who may not discriminate against a class of buyers may cut them off. A powerful buyer may obtain advantages without limit in the form of preferential access to goods, quicker delivery, readier extension of credit, etc.
- The law has curbed not only practices of the powerful, but also practices of others designed to furnish protection against the powerful. Flexible adjustments to give independent small concerns some of the buying advantages of chain stores have been struck down.

OPD'S BOOKSHELF

Some American Drug History

Filled with interesting and entertaining reading is a treatise on DRUGS AND PHARMACY IN THE LIFE OF GEORGIA.* It starts with the search for badly-needed botanical drugs in the wilds, popular in the therapeutics of the native Indians, which contributed strongly to the founding of that colony. It covers the pharmacal and medical progress that has been made there, including the discovery in Georgia drug stores of ether anesthesia in 1842 and "Coca-Cola" in 1886.

DRUGS AND PHARMACY IN THE LIFE OF GEORGIA.* By Robert Cumming Wilson. 443 pages. $6.

What Lube Oils Do

This is the second edition of the American Chemical Society monograph No. 143, called PERFORMANCE OF LUBRICATING OILS.* Since the first edition was published seven years ago, many papers have been printed on various phases of lubricating oil technology. This book, with adequate bibliography, brings to the industry a summary of such papers.

Subjects new to the edition include multigrade motor oils, fretting wear and paper chromatography. Entire chapters are included on lubrication processes, rheology, oxidation, bearing corrosion, sludge and lacquer deposition, emulsification and foaming.

*PERFORMANCE OF LUBRICATING OILS. By H. H. Zuidema. 205 pages. Reinhold Publishing Corporation. New York. $7.

Sales Power for Paint Sellers

Here is the best thinking available on how to sell paint, presented by the chemical coatings subcommittee of the National Paint, Varnish & Lacquer Association's special committee on sales training. Called HIDDEN POWER-SALES TRAINING PROGRAM,* it answers the industry's problem of how to give sales personnel the proper understanding, attitudes, and approach to marketing. Matters treated include the paint company's philosophy, research behind the the products, product manufacturing, materials testing and control, codes of ethics, salesmen's compensation, customer relations and employer-employee relations.

*HIDDEN POWER — SALES TRAINING PROGRAM. By the chemical coatings section, National Paint, Varnish & Lacquer Association. 377 pages. National Paint, Varnish & Lacquer Association. Washington, D. C.

Handbook for Druggists

A handy reference work for pharmacists, this volume will serve equally as textbook for students and teachers of pharmaceutical compounding and dispensing, as it treats in detail all facets of the pharmacist's trade. Revising and updating four previous editions, this edition of HUSA'S PHARMACEUTICAL DISPENSING* brings a radical departure the previous method. The first four were written by a single authority; the fifth assigns a chapter each to a qualified authority on a given subject. The entire volume is edited by Dr. Eric W. Martin, who is editor-in-chief of *Remington's Practice of Pharmacy.*

*HUSA'S PHARMACEUTICAL DISPENSING. Fifth edition. Edited by Eric W. Martin. 729 pages. Mack Publishing Company. Easton, Pa.

API Compendium

The centennial of the American Petroleum Institute provides the occasion for a new edition of PETROLEUM FACTS AND FIGURES,* containing within a single volume more data about the industry than is available elsewhere and superseding all earlier editions. For industry men the book gives an exhaustive treatment of current petroleum data. In addition, a broadly historical perspective is included to aid students, educators and market researchers.

*PETROLEUM FACTS AND FIGURES, CENTENNIEL EDITION. Compiled by the American Petroleum Institute. 472 pages. American Petroleum Institute. New York.

Heavy Chemicals

Trade hunches that pig lead was set to take a tumble became a fact as soon as trading got under way last week. A major maker was quick to trim the metal ½ cent per pound, as demand was seen to slide in the face of rising stocks, and others wasted no time in following suit. Elsewhere in the metals picture, predictions that aluminum levels would rise came to fruition perhaps sooner than expected when the leading domestic maker, following a move by its Canadian counterpart, marked prices up 1.3 cents a pound, thus restoring them to the pre-decline level of early 1958. Other producers followed suit.

Does the new aluminum price tag represent a stable level or are further advances to be expected in the months ahead? That's what market observers are debating in connection with a "corrective strengthening of prices," predicted in a year-end statement by a top industry spokesman.

On one side of the argument, sources note that in restoring the market to its former price level, last week's boost does not take into account wage hikes and other cost increases encountered by producers during the two intervening years. Thus, further firming is foreseen.

But, on the other side, it is felt that, due to productive overcapacity, the market is not now so strong, despite brisk demand, as to permit a complete restitution of profit margins.

In other price action last week, tin again declined, owing to uncertainty of the steel strike outlook, but mercury, after its long soft spell, appeared settled in a steady trend, unmoved now for three consecutive weeks.

The American Paper and Pulp Association reported production for the week ended December 12, at 95.0 percent of theoretical capacity as compared with the revised figure of 95.4 percent for the previous week and 90.6 percent for the corresponding week of last year.

Price Trends

Advanced

Aluminum, metal, 1.3c. per lb.

Reduced

Lead, metal, ½c. per lb.
Tin, straits metal, 1c. per lb.
Tin salts, ½c. to 3/5c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
106.78	106.79	107.01	103.53

For Current Prices See Page 9

Acids

The following preliminary figures complied by the Bureau of Census, report production of specified acids in tons.

	October	September
Hydrochloric	90,064	89,175
Nitric	268,720	251,343
Phosphoric	162,725	153,370
Sulfuric (gross)	1,445,246	*1,336,729

* Revised.

Hydrochloric — The Taft-Hartley injunction won't last forever. The continued deadlock of labor negotiations in steel, which has trade sources eyeing nervously the approaching end of the ninety-day period, is the only sour note sounded in the current industrial picture.

But the harmonious notes stood out last week. Steel makers continued to absorb hydrochloric at a record pace, and other users were more than normally active for this time of the year. The inventory count may slow down business during the next two weeks, but not by much, trade sources say.

Hydrofluoric—The aluminum industry exudes confidence about the 1959 business outlook, in respect to prices and sales, and equal, though quiet, confidence in respect to labor negotiations. HF people see nothing to fear for the morrow, and the present is bringing a harvest of demand in aluminum and other industrial outlets.

Nitric—Fertilizer demand is off, seasonally, other makers moderately to briskly active.

Sulfuric — Moon-rocketing demand noted, especially from steel makers. American Iron & Steel Institute estimates steel output during the week just ended at 2,729,000 net tons, or 96.4 percent of capacity, a near-record level, as compared with an actual total of 2,732,000 tons, or 96.5 percent of capacity, a record level, during the preceding week.

Just issued by American Iron & Steel Institute, steel production figures for November tell of sharp revival, to the edge of boom, after long drawn-out drought of strike-saddled days.

Exactly 7,262,000 net tons of steel were produced in November, the highest in any month since July.

And July, the Institute recalls, was evemonth of the strike, when steel users, whinnying at the approach of deadline, rushed to mills to grab every ingot they could lay hand on, and producers, in response, put hand to throttle without stint.

Bases and Salts

The following preliminary figures, compiled by the Bureau of Census, report production of specified chemicals in tons:

	October	September
Calcium carbide	75,855	79,024
Caustic soda, all processes	419,950	397,465
Chlorine gas	386,972	364,331
Soda ash, syn	428,138	406,541
Nat.	62,647	63,229

Caustic Soda—Excellent sales to the rayon people, good sales to others, prices steady, supply entirely adequate to meet all trade requirements.

Chlorine—The brisk sales pace that set-in late last summer has shown no tendency to retreat, trade sources say. Perhaps, it is felt, the next two weeks may bring a marginal shading-off of demand as consumers trim intake in an effort to hold down year-end inventories.

Lime—Since resumption of steel operations lime output has been running at about 90 to 95 percent of capacity. Plants supplying the steel industry are reported to be in a light to moderate over-sold condition. Barring another strike, this situation should continue throughout the first half of 1960, trade sources say.

A serious threat at this time, it is reported, arises in connection with railroad cars. Special equipment, such as covered hoppers and container cars, are reported to be extremely scarce, and periodic shortages of good quality box cars are becoming apparent.

Soda Ash—Material is moving along nicely, price unchanged, supply in good balance, trade sources concur.

From Department of Commerce comes an estimate that flat glass dollar volume will close the current year at a record level of $550 million, up 17 percent from 1958.

Stepped-up output of automobiles, stepped-up construction, stepped-up manufacture of furniture account for the souped-up market, Commerce says.

And adds:

"In 1960, increased production is anticipated in these industries. The expected increase in automotive production will stimulate flat glass output because of the continued emphasis on large areas of glass in the new model cars. Production is expected to exceed that of 1959 by approximately 10 percent and reach an all-time high of $600 million."

Looking backwards a bit, Commerce notes that in the first nine months of 1959, output of sheet glass in terms of quantity increased 38 percent over the same period of 1958 and 36 percent over that of 1957. Plate glass output during the period was 43 percent and 24 percent above that of the like periods of 1953 and 1957, respectively.

Imports, during the entire year, Commerce says, should reach an all time high, topping the previous record, established in 1956, of $45.6 million. Imports declined to $31.2 million in 1957, the Department recalls, and then turned higher to a level of $35.6 million in 1958.

Nonferrous Metals

Aluminum—A corrective strengthening of prices, predicted early in the week, began to take effect long before the week closed. A price boost of 1.3c. per pound, restoring US quotations to the level of early 1958, was touched off, though indirectly, by the big Canadian aluminum maker who, on Monday, advanced prices in Canada and elsewhere, excluding the

COLUMBIA-SOUTHERN®

CAUSTIC SODA

LIQUID—50% and 73%
8,000 and 10,000 Gallon Tank Cars
SOLID • FLAKE
Standard Drums

COLUMBIA-SOUTHERN CHEMICAL CORPORATION
SUBSIDIARY OF PITTSBURGH PLATE GLASS COMPANY
ONE GATEWAY CENTER · PITTSBURGH 22 · PENNSYLVANIA

DISTRICT OFFICES: Boston • Charlotte • Chicago • Cincinnati Cleveland • Dallas • Houston Minneapolis • New Orleans New York • Philadelphia • Pittsburgh • St. Louis • San Francisco

SODIUM SULPHATE
Anhydrous

F. H. Ross & Co.
MUrray Hill 2-7136
155 E. 44th Street • New York 17, N. Y.
EXpress 2-2121
3930 Glenwood Drive • Charlotte, N. C.

Call our nearest sales office or write: THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

Heavy Chemicals

US. In response, the leading American maker posted a corresponding advance here.

Does the new 26c. price tag represent a stable level or are further advances to be expected in the months ahead? That's what market observers are debating in connection with the predicted "corrective strengthening."

On one side of the argument, sources note that in restoring the market to its pre-decline level, last week's boost does not take account of wage hikes granted and other cost increases encountered by producers since then.

But there are others who feel that the market is not so strong now as to permit a complete restitution of profit margins. Though demand is quite brisk, still a condition of overcapacity remains and must be taken into account, those on that side of the argument contend.

Shipments of aluminum produced in the U. S. will increase 10 to 15 percent in 1960 over the 1959 level of 4,800,000,000 pounds, which in turn was 35 percent above the 1958 figure.

This prediction emanates from the president of the nation's largest aluminum producer.

Actual consumption of aluminum during 1960, it was said, should rise more than 10 to 15 percent, because the total will include material drawn from users' inventories. These inventories have been accumulated during the present protracted period of strike-scare buying.

Profits this year, he said, will not reflect the rise in shipments, owing to the continued downtrend or prices, the result of foreign and domestic producers competing for a price advantage.

Other high-ranking sources in the trade, it should be noted, have predicted a firmer price level for 1960, as well as substantially increased shipments.

Copper—Output was adversely affected during November by strikes, but figures just issued by the Copper Institute indicate that the production deficit was not serious.

US output, the Institute reports, totaled 9,710 tons, as against 9,861 the previous month and comparing with a representative pre-strike total of 11,352 tons in the month of June. In August, the month when output was most seriously hampered by strikes, American smelters and producers turned out only 3,994 tons of the metal.

Turning to the picture outside the US, the Institute reports production of 921 short tons as against 1,094 in October and 1,074 in September. ("Outside the US" includes all of South America, Europe and most of the non-communist East, comprising, in all, about 90 percent of free world output.)

Combined totals for US and outside sources were 10,631 for November and 10,955 for October.

Combined stocks closed the month at 16,201 tons as against 13,657 a month earlier.

Lead—A price trimming, as stated in this space a week ago, had been widely expected. Stocks of lead, both metal and ore, were piled sky-high, and smelters, with an eye to the broad spread lying between domestic and foreign prices, showed little inclination to buy in this market beyond filling actual needs.

As workers returned to the job, following settlement of a strike that had closed the 13 plants of a major lead smelter, predictions became rife that the price would decline from its strike-induced level of 13c. per pound, New York.

On Tuesday, some 24 hours later, a major producer trimmed the price ½c. to 12½c. Others followed suit, and as the week drew to a close the price was seen holding firm at that lower level.

Mercury—Prices, long soft, have settled in a steady trend, quoted unchanged for three weeks now at a range of $215 to $217 per flask, minimum ten flasks, prompt shipment.

Silver—Steady tone sustained for seven months, silver selling at 91⅜c. for a troy ounce, spot.

Tin—Uncertainty of steel strike outlook caused market to soften, prices closing Friday at 99c. per pound, off 1c. from a week earlier.

World consumption of primary tin fell to 12,400 long tons in July from 15,200 the month before, according to an estimate by the International Tin Council. In the US, July consumption was off to 3,210 tons from 4,995 in June, and in the United Kingdom, off to 1,682 tons from 1,987.

US primary tin consumption during the first three quarters, reports Mines Bureau, totaled 35,850 tons, as compared with 35,795 in the like 1958 period. A nine percent drop in the use of tin by tinplaters, resulting from the steel strike, was more than offset by a 24 percent rise in intake by other consumers.

Reichhold Has New Plans

—*Continued from page 5*

Reichhold will have four facilities producing phthalic in the United States. The others are located at Detroit, Mich,; Azusa, Calif., and Elizabeth, N. J.

Reichhold's third "real estate transaction" is the selling of the Lindsay, Ontario, plant of its recently-acquired Varcum Chemical Division to a company subsidiary, Reichhold Chemicals, Ltd., of Canada. The plant is reportedly the second largest producer of phenolic molding compounds in Canada.

Prior to the sale, resins used in the production of the molding compounds were supplied by the Varcum Chemical Division's plant in Niagara Falls, N. Y. In the future, these will come from the Reichhold Chemicals, Ltd., plant at Ste. Therese de Blainville, Quebec, where production facilities are being expanded.

WESTERN PENNSYLVANIA CHEMICAL CO., INC.

MAIN OFFICE

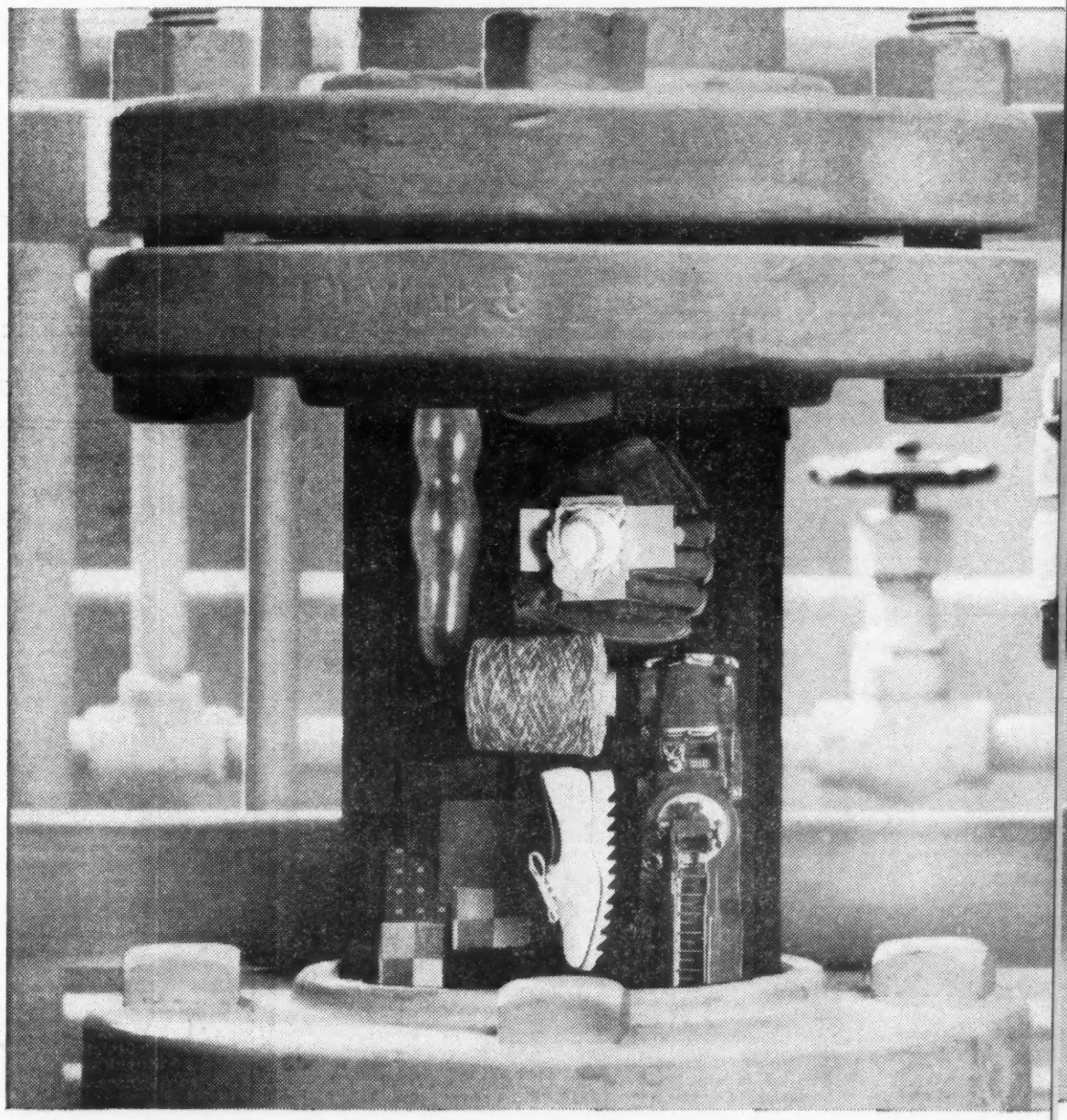
4125-41 Sixth Avenue, Altoona, Pa.

Acetic Acid	Caustic Soda	Muriatic Acid	Sodium Metasilicate
Acetone	Liquid Chlorine	Nitric Acid	Sodium Bichromate
Aluminum Sulphate	Copper Sulphate	Paradichlorobenzene	Sodium Sulfite
Anhydrous Ammonia	Di-Sodium Phosphate	Perchlorethylene	Sulphuric Acid
Aqua Ammonia	Ethylene Dichloride	Potassium Permanganate	Sodium Fluoride
Barium Carbonate	Ferrous Sulphate	Phosphoric Acid	Sodium Hydrosulfite
Battery Acid	Formaldehyde	P. H. Plus Blocks	Sodium Sulfate
Bicarbonate of Soda	Formic Acid	Proprietary Solvent	Sodium Silico Fluoride
Borax	Hydrogen Peroxide	Purex	Trichlorethylene
Bottle Alkali	Industrial Floor Dry	Santosite	Toluol
Calcium Chloride	Isopropyl Alcohol	Soda Ash	Tri-Sodium Phosphate
Calcium Hypochlorite	Lime	Sodium Bisulfite	Xylol
Carbon Tetrachloride	Liquid Sulfur Dioxide	Sodium Hexametaphosphate	Urea
Caustic Potash	Methanol		

BRANCH OFFICES

Glassport Elizabeth Road P. O. Box 366 Elizabeth, Pennsylvania Phone HO 2-7525	1543 West 38th St. P. O. Box 158 Erie, Pa. Phone GL 4-8151	Brown & Catherine Sts. P. O. Box 89 Middletown, Pa. Phone WH 4-4638

Large warehouse stocks located strategically to assure prompt same day or overnight delivery. Operate fleet of 52 trucks for servicing of less truckload, full truckload and tank truck shipments. Recognized repackers of Acids, Chlorine, Solvents and other heavy chemicals.



FOR HELPFUL IDEAS ON THE CHEMICALS
THAT GO INTO YOUR PRODUCTS.
YOU'LL LIKE DOING BUSINESS WITH
COLUMBIA-SOUTHERN

Precipitated Calcium Carbonate

U. S. P. and Technical Grade

MISSISSIPPI LIME COMPANY
Alton, Illinois

Upjohn President Cites Need for Proper Profit

—Continued from page 3

Corporation, Bloomfield, N. J., and John T. Connor, of Merck & Co., Rahway, N.J.

Dr. Upjohn told the committee that if his firm attempted to meet the low price levels of small suppliers cited by probers to show the "unreasonableness" of the prices maintained by the big producers, Upjohn would soon be out of business.

It simply cannot sell at such levels and continue its research into new drug cures while at the same time meeting the trade-name promotional activities of other manufacturers, he said.

Originally scheduled to testify October 15, Dr. Upjohn was called to the witness stand two days early by the committee for a Saturday session to finish the steroid part of the price probing for the recess that will continue until late in January.

Dr. Upjohn had only a brief opening statement to offer the committee in defense of his company's operations. It was a short review of the founding of his company seventy-five years ago by his grandfather and grand-uncle. The company's emphasis throughout its existence, he explained, has been service to the medical profession.

Upjohn became interested in the steroid hormones in 1933, he added, and its basic and analytic research in this field are responsible for advances in synthetic chemistry that have helped to make the hormones available in almost unlimited quantities.

At one point the investigating committee alleged a 10,000 percent price spread between bulk and finished products. The spread was in connection with sales of progesterone used both in the manufacture of other drug products and as a separate pharmaceutical. Paul Rand Dixon, counsel for the committee, said Upjohn bought $3 million worth of the hormone last year at a price of 14 cents a gram, but when it was sold to druggists in ampule form, the cost was $15 a gram. He said smaller firms sold the hormone to druggists for $2 or $2.98 a gram.

Raw Material a Fraction of Cost

Dr. Upjohn defended the markup on the grounds that the cost of the raw material was only a fraction of the cost of the end product. He said this was but one small part of the company's total business and the committee should give account to the overall costs of distribution, including promotion, advertising, packaging, etc.

He was also called upon to defend price differences for the company's steroids sold here and those in Britain which ranged over $10 a bottle of 100 tablets. He said that it was not a policy of his company to sell at lower prices abroad than in the United States, but the price of the drug, prednisolone, was, in effect, fixed by the government in Britain.

Earlier, he had been questioned about the fact that Upjohn sold quantities of prednisolone to Schering Corporation for $2.37 a gram while the price charged to druggists was $38.80 per gram. Dr. Upjohn replied that the two prices were not comparable because the sale to Schering was in bulk sale while the drug sold to druggists was a much more complex product, and involved a great many more costs of distribution.

Earlier evidence submitted at the hearings by the committee investigators showed that the four major producers of prednisolone, Schering, Merck, Upjohn and Chas. Pfizer & Co., Brooklyn, N. Y., all had the same list price of $35.80 to druggists.

In reply to a question from Sen. Estes Kefauver of Tennessee, committee chairman, Dr. Upjohn said the price was arrived at independently. He explained that Schering was first in the market with prednisolone and when Upjohn came into the picture it would have gained nothing by reducing the price.

Problems With New Product

"When you come on a market with a new product, you are in this position," Dr. Upjohn said: "Your costs are high. You are going to compete against a product that is known. You have got to put forth a major selling effort to break into the market. Our costs for this product were very high at the start."

Sen. Kefauver noted, however, that the $35.80 price was established three years ago. Upjohn now produces 45 percent of the total output of prednisolone, the senator added, and he could not see why the price has not been reduced to the druggists since bulk prices have been greatly reduced.

Dr. Upjohn said his firm employs 5,700 persons, including 600 in the research laboratories and 1,000 detail men. He denied that the detail men were ordinary salesmen as such, but are the "prefessional service men" for the company whose role is becoming of increasing importance to the drug industry as new drugs are developed.

Such men work on a straight salary basis without commissions, he added, and according to the American Medical Association are the sole source of information on new drugs for two-thirds of the doctors of the country.

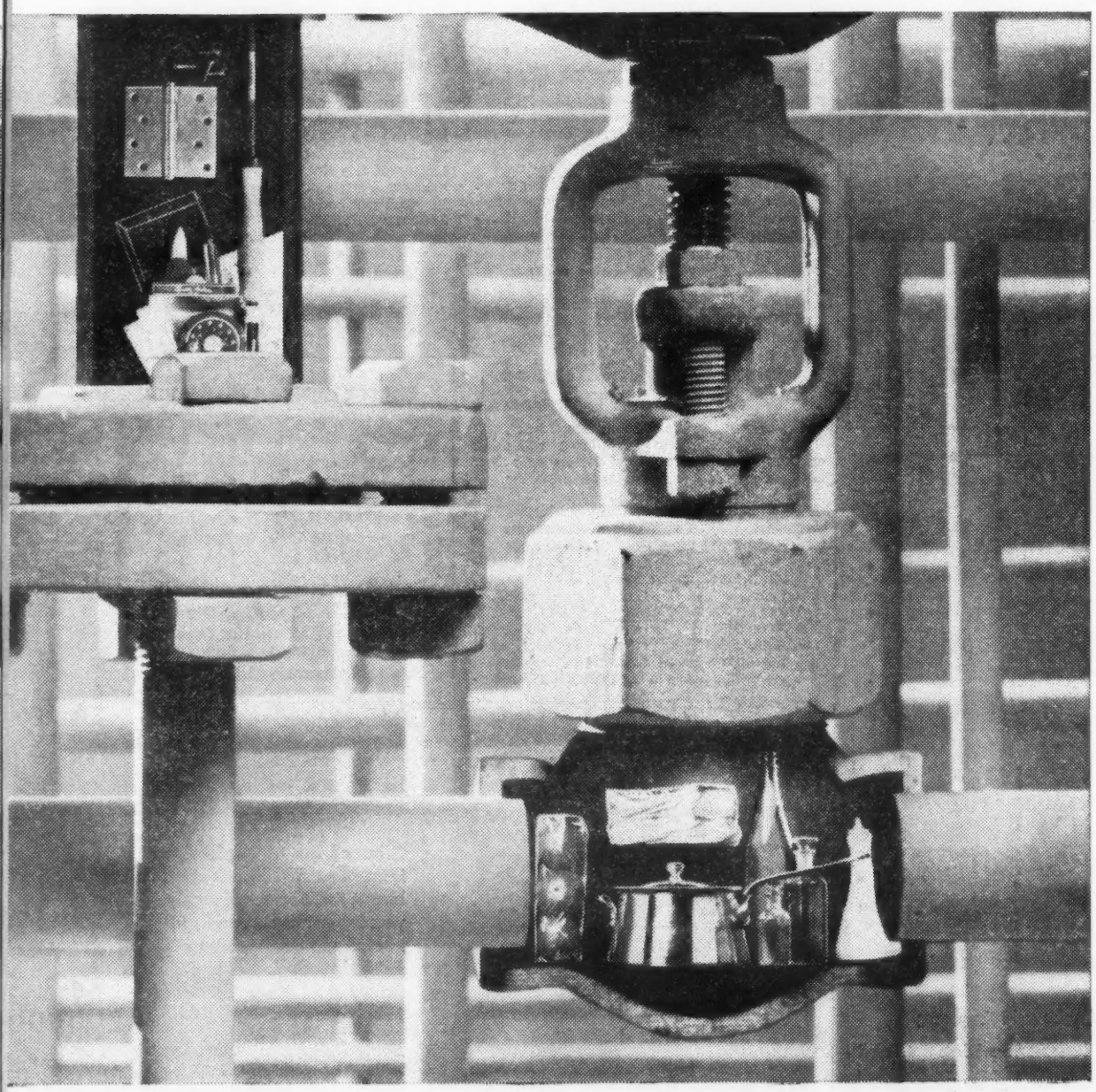
Sun Oil Reported Ripe

—Continued from page 3

hydride plant at Newark, Ohio (OPD, 11/30/59).

Reichhold is understandably mum on source of supply, type of raw material to be supplied and process information at this time. The company is currently putting finishing touches on a phthalic plant at Elizabeth, N.J. The facility uses the fluid-bed process, for which petroleum naphthalene is particularly suitable owing to its purity.

Buyers for the phthalic makers indicate that at least two other petroleum producers beside Ashland and Sun are busy appraising potential markets right now: Mobil Oil Company, New York, and Sinclair Refining Company, New York.



You can count on smooth production when you use Columbia-Southern chemicals, because they'll be delivered to you on time, in the grades and quantities ordered. You'll find the quality consistently high, too.

But you get far more than prompt delivery and consistent quality when you work with Columbia-Southern. You can call on Columbia-Southern's solid experience in chlorine, alkalies, and related chemicals to help you improve the efficiency of your processing activities. Your Columbia-Southern Representative will give you sound, profit-building advice on such vital matters as forms and grades, transportation economics, storage methods, safety precautions, and applications.

Why not start with a general survey of your current purchases? Call in your local Columbia-Southern Representative and let him work with you in evaluating every step. You'll be glad you did.

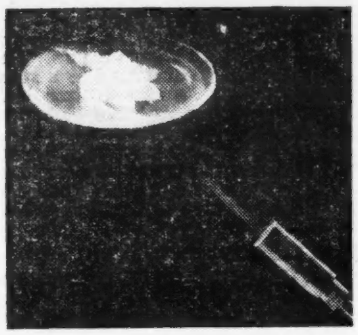
Columbia-Southern Chemical Corporation, One Gateway Center, Pittsburgh 22, Pa. Offices in fourteen principal cities. In Canada: Standard Chemical Limited.

COLUMBIA-SOUTHERN CHEMICAL CORPORATION

A Subsidiary of Pittsburgh Plate Glass Company

Chlorine • Caustic Soda • Caustic Potash • Soda Ash • Sodium Bicarbonate • Solvents • Ammonia
Chromium Chemicals • Barium Chemicals • Sulfur Chemicals • Agricultural Chemicals • Reinforcing Pigments
Calcium Chloride • Muriatic Acid • Calcium Hypochlorite • Hydrogen Peroxide • Titanium Tetrachloride

FLUOROLUBE®
oils and greases



are thermally stable up to 300° C., won't burn at any temperature . . . are inert to concentrated nitric acid and other highly reactive materials such as oxygen and hydrogen peroxide.

These highly stable Hooker polymers of trifluorovinyl chloride have unusually high densities for organic compounds—from 1.8 gm/cc to 2.0 gm/cc. Yet they wet metallic surfaces readily and thoroughly. They are non-toxic.

Uses: Lubricants for ultra-precision instruments, for valve, pump, and bearing assemblies, for vacuum pumps; impregnants for gaskets and packing in highly corrosive service; lubricants and sealants for polyvinyl chloride pipe and fittings.

For technical data on Fluorolube oils, write for Bulletin No. 30; for data on greases, ask for Bulletin No. 41.

HOOKER ELECTROCHEMICAL COMPANY
812-3 FORTY-SEVENTH STREET, NIAGARA FALLS, N. Y.

Niagara Falls Tacoma Montague, Mich. New York Chicago
Los Angeles Philadelphia Worcester, Mass.
In Canada: Hooker Chemicals Limited, North Vancouver, B. C.

HOOKER CHEMICALS PLASTICS

SHARE SALES POSTS: Fred P. Boehm (left) and Charles E. Varn, appointed assistant directors of the sales department of Solvay Process Division of Allied Chemical Corporation, New York. Mr. Boehm is succeeded as Pittsburgh, Pa., sales branch manager by Robert E. Clagett, Mr. Varn's post as manager of the New Orleans, La., sales branch is being filled by G. Richard Barclay.

Dartell Changes Hands, Has Expansion Program

Dartell Laboratories, Los Angeles, now under new management, has plans to broaden its interests in the drug field and step up pharmaceutical research.

A transfer of effective control came recently when John V. Vaughn was elected president of both of the two new California firms that will operate the manufacturing and sales divisions of Dartell Laboratories. Concurrently Mr. Vaughn purchased the major financial interest in Dartell.

Norman Dartell, founder and former owner of the company which bears his name, will remain with the new corporations in an advisory and management capacity. No changes in management personnel are contemplated, it is reported.

Eastman Chemical Develops New Polyethylene Compound

Eastman Chemical Products, Inc., New York, a subsidiary of Eastman Kodak Company, has developed three new low molecular weight polyethylene resins.

The products, designated "Epolene LVE," "Epolene HDE" and "Epolene HD," are designed to round out Eastman's already existing line of polyethylene compounds. The first is a low viscosity, emulsifiable material; the second, high density, emulsifiable and the third, high-density.

Prospective end-uses for the resins, Eastman says, lie in the fields of rubber, coatings, polishes, textile finishes, and plastic molding and extrusion compounds.

To permit early availability on a commercial scale, the company has expanded its resin producing facilities at Longview, Tex.

Chemical Buying in 1960's To Feature Parley of P.A.'s

Spotlight will turn on "Chemical Buying in the 1960's" at two mid-winter meetings slated by the Chemical Buyers' Group of the National Association of Purchasing Agents. The meetings will be held in Chicago at the Congress hotel on January 27-28 and the Commodore hotel in New York on February 3-4.

J. W. McNeil, of Pittsburgh Coke & Chemical Company, will be chairman, assisted by vice-chairmen J. H. Saville of American Viscose Company and A. M. Eggeman of Witco Chemical Company.

Look to BECCO first for

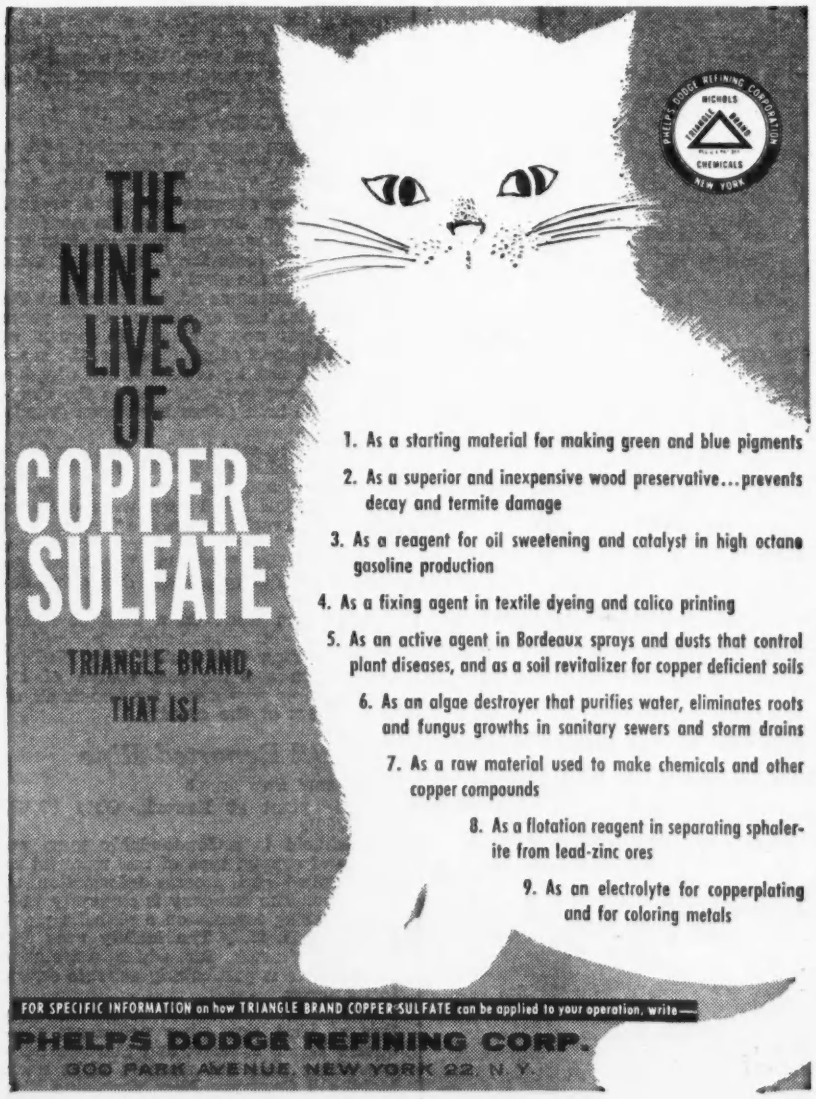
Sodium Perborate

as well as

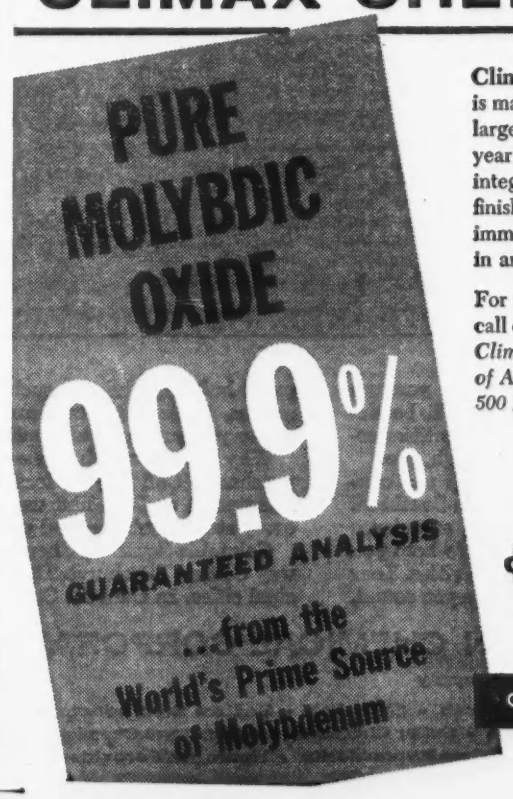
- Hydrogen Peroxide
- Peracetic Acid
- Ammonium & Potassium Persulfates
- and other Peroxygen Chemicals

Write for list of free technical bulletins.

BECCO Chemical Division
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York


THE NINE LIVES OF COPPER SULFATE
TRIANGLE BRAND, THAT IS!
PHELPS DODGE REFINING CORPORATION
NICHOLS
TRIANGLE BRAND
CHEMICALS
NEW YORK
1. As a starting material for making green and blue pigments
2. As a superior and inexpensive wood preservative...prevents decay and termite damage
3. As a reagent for oil sweetening and catalyst in high octane gasoline production
4. As a fixing agent in textile dyeing and calico printing
5. As an active agent in Bordeaux sprays and dusts that control plant diseases, and as a soil revitalizer for copper deficient soils
6. As an algae destroyer that purifies water, eliminates roots and fungus growths in sanitary sewers and storm drains
7. As a raw material used to make chemicals and other copper compounds
8. As a flotation reagent in separating sphalerite from lead-zinc ores
9. As an electrolyte for copperplating and for coloring metals
FOR SPECIFIC INFORMATION on how TRIANGLE BRAND COPPER SULFATE can be applied to your operation, write—
PHELPS DODGE REFINING CORP.
300 PARK AVENUE, NEW YORK 22, N. Y.

CLIMAX CHEMICALS



Climax Pure Molybdic Oxide is manufactured from the world's largest single source of supply — year in, year out . . . under fully integrated facilities, from mine to finished product. It is available for immediate shipment from stock — in any quantity.

For technical information or samples, call or write: *Chemical Sales Dept., Climax Molybdenum Co., a division of American Metal Climax, Inc., 500 Fifth Ave., New York 36, N. Y.*

CLIMAX CHEMICALS

CLIMAX MOLYBDENUM CO.

A division of
American Metal Climax, Inc.

Kefauver's Head Buzzing With Reform Plan

—Continued from page 3

advertising of drugs that are worthless and may, in fact, be harmful.

Sen. Kefauver wound up the first phase of the drug price investigations with an unexpected Saturday session (December 12) to probe the pricing policies of Upjohn Company, Kalamazoo, Mich., in the corticosteroid field.

No date has been set for the resumption of the investigations, but they are expected to start up again about the middle of next month with attention centered either on antibiotics or insulin. A definite announcement will be made after Christmas.

The recommendation that drug producers filing new drug applications submit their advertising and promotional literature at the same time was one of several proposals advanced during the hearings by Seymour N. Blackman, executive secretary of Premo Pharmaceutical Laboratories, Inc., South Hackensack, N. J.

Suggests Public Utility Treatment

He proposed to the committee that the drug manufacturing industry be treated in the nature of a public utility because it operates in a "captive" market—a market made up of persons who are ill and can do nothing more than accept the drugs offered and of professional pharmacists who are required to follow physicians' directions and fill prescriptions with the drugs specifically ordered.

He also suggested that a certification system be established for the drug manufacturing industry. Mr. Blackman proposed that manufacturers be certified as to their facilities and that they are in effect, producing correctly, in place of the present system of controls which do not operate until the product is produced and marketed.

"If you could, for example," he said, "state that a pharmaceutical manufacturer must have clean equipment, he must have cement decks, he must analyze every batch of material that comes into his plant, he must have an animal laboratory to conduct routine toxicity tests—if these specifications were drawn up and a pharmaceutical plant had to have these facilities before they could ever market a pharmaceutical. I think you would find that the physicians would respect generic names more widely."

Advertising Proposal Not New

The proposal that new drug applicants submit their advertising matter simultaneously with their new drug applications, was not new to FDA officials. To a certain degree this is done now. Manufacturers are required to submit their brochures and package materials to FDA along with the application.

But, it was pointed out, if the producers also had to submit all the advertising material either to FDA or simultaneously to the FTC, which has jurisdiciton over advertising, some kind of different setup would have to be established both in the government and in industry to handle the matter.

Officials preferred not to comment specifically on the proposal, however, "without seeing it in writing."

As regards Mr. Blackman's suggestion of a certification system for pharmaceutical manufacture, FDA officials commented that this is worthy of consideration, although they pointed out that some of the requirements proposed are things currently covered by new drug applications and factory inspection work of the agency.

Cowles
DETERGENT SILICATES
for compounding

Laundry products
Metal cleaners
Dairy cleaners
Dish washing compounds
General purpose cleaners
Soap builders
Paint cleaners
Paper de-inking compounds
Household cleaners
Floor cleaners

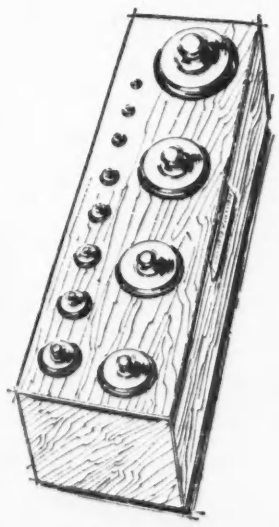
★ **CRYSTAMET***—The new form of Sodium Metasilicate—Pentahydrate

★ **DRYMET***—The original anhydrous Sodium Metasilicate

★ **DRYORTH***—Sodium Orthosilicate. Technically anhydrous

STOCKS IN PRINCIPAL CITIES

Cowles CHEMICAL COMPANY
*Reg. U.S.Pat. Off.
7018 Euclid Ave. • Cleveland 3, Ohio



HOW DO YOU WEIGH THE MERITS OF SODA ASH?

Be sure to evaluate every factor! Wyandotte Soda Ash offers you:

- purity and uniformity
- quick, dependable delivery
- helpful technical service

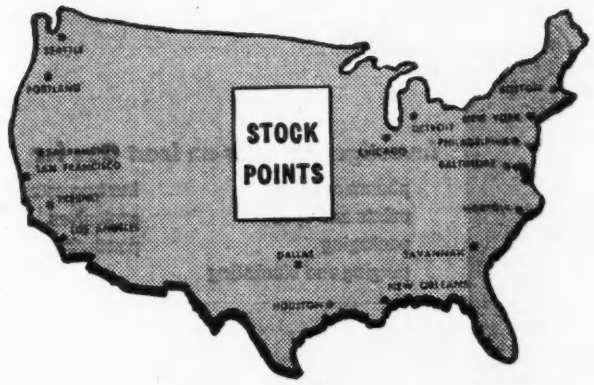
Let us serve you!

Wyandotte CHEMICALS
MICHIGAN ALKALI DIVISION
Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.

GULF®
Molten SULFUR
99.9% pure.
Immediate delivery.
Write or phone.

PETROCHEMICALS DEPARTMENT SALES OFFICE, Gulf Oil Corporation
360 Lexington Ave., New York 17, N. Y. • **QUALITY CHEMICALS** *from* **PETROLEUM**

CMC



IMPERIAL CHEMICAL INDUSTRIES LIMITED

Ammonium Chloride, Grey and White • Ammonium Bicarbonate USP • Ammonium Carbonate • Bleaching Powder Tropical 34%-36% Cl, • Calcium Formate • Chlorinated Rubber • Copper Cyanide • Potassium Cyanide • Sodium Cyanide, all grades • Zinc Cyanide • Sodium Aluminate • Sodium Bicarbonate USP and Tech. • Sodium Carbonate Monohydrate • Sodium Perborate • Trichlorethylene, all grades • Urea, 46% Tech. • 3,5,5 Trimethyl Hexanol • 2:4 Dimethyl 6-Tertiary Butyl Phenol • Hexachloroethane

PETER SPENCE & SONS LIMITED

Aluminum Sulphate, Iron Free • Ammonia Alum • Butyl Titanate • Potassium Alum • Titanium Potassium Oxylate • Cobalt Molybdenum Catalysts

DEEPWATER CHEMICAL CO., LIMITED

Iodine, Resublimed USP and Reagent * Potassium Iodide, USP and Reagent * Potassium Iodate, USP and Reagent * Special Potassium Iodide Mixtures * Cuprous Iodide, Tech. * Sodium Iodide

LCL quantities available from Distributor Stocks in your area. This is only a partial listing of the items we offer. Write for complete product listings.

CHEMICAL MANUFACTURING CO., INC.
444 Madison Ave. • New York 22, N. Y.
714 West Olympic Blvd. Los Angeles 15, Calif.
114 Sansome Street San Francisco 4, Calif.

WHITE ARSENIC
(Arsenic Trioxide)

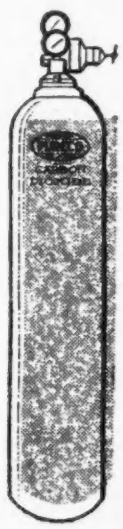
AMERICAN FIRSTOLINE CORP.
93-03 SUTPHIN BLVD.
JAMAICA 35, NEW YORK
Phone: AXtel 1-8200
Cable Address: FIRSTOLINE, NEW YORK

Look to BECCO first for
Hydrogen Peroxide
as well as
• Peracetic Acid • Sodium Perborate
• Ammonium & Potassium Persulfates
• and other Peroxygen Chemicals
Write for list of free technical bulletins.
BECCO Chemical Division
Food Machinery and Chemical Corporation
Station B, Buffalo 7, New York

CUPROUS CHLORIDE
HENRY BOWER CHEMICAL MFG. CO.
30TH AND GRAYS FERRY RD. PHILADELPHIA 46, PENNA.

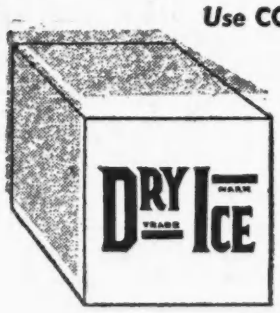
PURECO CO_2

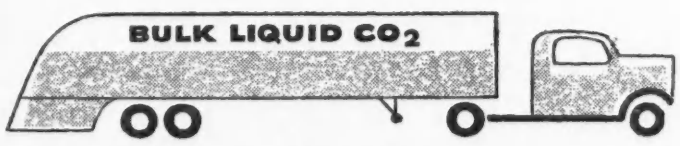
The answer to your problem?



Investigate CO_2 as an Inert Gas for
pharmaceuticals
paints and dyes
packaging
purging and blanketing
inert pressure transfer
explosives
powdering

Use CO_2 as a Refrigerant for
pharmaceuticals
grinding, plastics, resins, gums, etc.
rubber tumbling
vacuum traps
low temperature testing
lyophilizing





Specify CO_2 as an Ingredient in
pharmaceuticals
ph control
foam rubber
asbestos cement cure
carbonation
foam plastic
water treatment
manufacture of carbonates

Pureco CO_2 is quickly available—in solid "DRY ICE", liquid or gaseous form from over 100 sales and service depots. There are also a variety of Pureco CO_2 supply systems available—cylinders—cylinder banks, converters, receivers—each "tailored" to fit your particular requirements.

Pureco Technical Sales Service is qualified through its research in the field to assist you in adapting CO_2 to your particular process. Call Pureco today.

PURECO CO

Pure Carbonic Company
A Division of Air Reduction Company, Incorporated
150 EAST 42nd STREET, NEW YORK 17, N. Y.

AT THE FRONTIERS OF PROGRESS YOU'LL FIND AN AIR REDUCTION PRODUCT

Jobs & People

American Alkyd Industries, Inc., Carlstadt, N. J.—**Paul J. Skvaril** has been appointed to the newly-created post of manager of West Coast operations. He was previously technical service representative for plastic products.

Archer-Daniels-Midland Company, Minneapolis, Minn.—**William A. Jarvey** has been named product manager of the vinyl plasticizer department. He was formerly technical service supervisor for "Admex" plasticizers.

Borden Chemical Company, a division of Borden Company, N. Y.—**Maurice S. Letourneau,** New York district sales manager for the polyco-monomer department since last August, has been named Eastern district sales manager.

Carboline Company, Houston, Tex.—**William A. Wood, jr.,** has joined the technical sales department, with headquarters in Houston covering the Texas-Louisiana area.

Courtaulds North America, Inc., New York—**Dr. Irwin Norman,** formerly head of the physical chemistry section in the research department of Courtaulds, Inc., at Mobile, Ala., has been appointed special technical assistant to the president of this newly-organized firm.

DeSoto Chemical Coatings, Inc., Chicago—**T. L. Dahlberg** has been appointed manager of maintenance finishes sales.

Diamond Alkali Company, Cleveland, Ohio—Three re-assignments have been made. **John H. Fonner, jr.,** has transferred from the Muscle Shoals, Ala., plant to the Edgewood, Md., plant as assistant plant manager. **Erich G. Schlaile** has been moved to Deer Park, Tex., as a process engineer, and **Robert S. Stark** has been transferred to the research and development department at Painesville, Ohio.

Dow Chemical Company, Midland, Mich.—Two section heads have been appointed. **Thomas J. Powers,** supervisor of waste control in the Midland division, has been named to head the consulting section. **John S. Talbot,** manager of the Dowell district office at Houston, Tex., since 1950, has been appointed head of the service section of Dow industrial service.

E. I. duPont de Nemours & Co., Wilmington, Del.—**Lucius Collins,** for the last seven years manager of the dyes and auxiliaries sales development section of the dyes and chemicals division, has been appointed manager of the division's New York consulting service for the dyeing and finishing trade.

E. I. duPont de Nemours & Co., Wilmington, Del.—**A. Lynam Satterthwaite,** manager of the control division of the elastomer chemicals department, is retiring after thirty-seven years with duPont.

Eaton Laboratories, a division of Norwich Pharmacal Comuany, Norwich, N. Y.—**Dr. Paul V. Newland** has been named director of the medical research and professional services section.

Enjay Company, New York—Two men have been advanced in the plastics division, **David R. Hammel** to technical coordinator and **Frederick T. Philips** to manufacturing coordinator.

Hoffmann-La Roche, Inc., Nutley, N. J.—Dallas, Tex., representative **John H. Stuart** has been transferred to Los Angeles, to cover southern California, Arizona, Utah and New Mexico.

Hooker Chemical Corporation, Niagara Falls, N. Y.—**A. Richard Perry** has been named assistant corporate controller. His former post, that of controller of the eastern chemical division, devolves upon **George C. Richards,** formerly of Hooker's Canadian subsidiary.

Magnus, Mabee & Reynard, Inc., New York—**Robert R. Kurtzweil** has been named sales representative for the territory covering Wisconsin, eastern Iowa, and Western Illinois.

National Aniline Division, Allied Chemical Corporation, New York—**L. R. Croce,** sales representative, has become an evening-class instructor at the Philadelphia Textile Institute.

Parke, Davis & Co., Detroit, Mich.—**Dr. Leonard T. Blouin** has been appointed associate research physiologist.

Schwarz BioResearch, Inc., Mount Vernon, N. Y.—**Louis Laufer** and **Lionel Reed** have been named assistant vice-presidents. **Vincent Mollett** has been named to the new office of assistant secretary.

Union Carbide Chemicals Company, New York, a division of Union Carbide Corporation—**Richard W. Bagley,** an entomologist, has joined the "Sevin" product group.

BASIC PRODUCERS FROM MINE TO FINISHED PRODUCT

COPPER SULFATE

All Crystal Sizes and Powdered

We MINE COPPER and are basic producers of Copper Chemicals—our technical know-how and basic position in Copper is your assurance of exacting quality control, strict uniform consistency and a plentiful competitive supply.

We would be pleased to send you complete information on TC COPPER SULFATE.

TC TENNESSEE CORPORATION

TENNESSEE CORPORATION
617-629 Grant Building, Atlanta, Georgia

Monsanto, Grain Processing Get Tolerances from FDA

Clearance has been granted to two additional tolerance petitions filed under the food additives law, it was announced by the Food and Drug Administration. This increases to seven the total number of clearances that have been granted to date.

One is a request of Monsanto Chemical Company, St. Louis, Mo., to permit the use of 1,2-dihydro-6-ethoxy-2,2,4-trimethylquinoline on three additional forage crops, corn, sorghums and Sudan grass, and in poultry feed. The chemical preservative is for the purpose of retarding oxidative destruction of both added and naturally occurring vitamins A and E.

The other petition was filed by Grain Processing Corporation, Muscatine, Iowa, permitting the addition of manganese bacitracin in chicken feed and swine feed in amounts not exceeding 11 parts per million. In approving the petition, FDA also set zero tolerances for residues of the material in the uncooked meat of swine and chickens and in chicken eggs.

Pennsalt Will Build

—*Continued from page 4*

marketing. We have found we can give better service to our specialty customers through establishment of strategically located production units in major market areas. In addition, the new unit gives us added capacity to meet the growing demand in the south for our specialized products. With chemical specialty plants in Pennsylvania, Ohio, Ontario (Canada), Illinois, California, Texas and now Georgia, we face 1960 well-equipped to serve our customers rapidly and efficiently."

Chemical People Watching

—*Continued from page 3*

that such vehicles be equipped with sleeper cabs and that consideration be given to a requirement that carriers of such commodities provide adequate insurance protection to the public commensurate with the potential damage that this particular type of cargo is capable of inflicting.

The commission said that both the truck driver and the carrier operating the truck, Pacific Powder Company, of Seattle, Wash., violated motor carrier safety regulations which require that vehicles transporting certain explosives avoid congested places and not be left unattended.

The report also said that Pacific Powder Company violated in part the regulations regarding packaging and labeling of explosives and the use of proper names of commodities on shipping papers.

Glidden Division Licenses British Firm to Sell Coatings

Glidden International C. A., a subsidiary of Glidden Company, Cleveland, Ohio has licensed Group Developments, Ltd., to manufacture and sell Glidden paint products in the United Kingdom.

Group Developments is a subsidiary of Courtalds, Ltd., a British manufacturer of yarns, textiles, chemicals and plastics.

Under the arrangement, Glidden will make available to these companies information about paint formulations, paint technology and merchandising techniques.

FTC Advances Tincher To New Antimonopoly Post

Federal Trade Commission has advanced Willam R. Tincher, assistant director of the Bureau of Litigation for Antimonopoly, to the newly-created post of associate director of the bureau.

With the commission since 1954, Mr. Tincher has served as trial attorney in antimonopoly cases challenging corporate mergers. He will remain at his old post as well as taking over the new one, FTC reports.

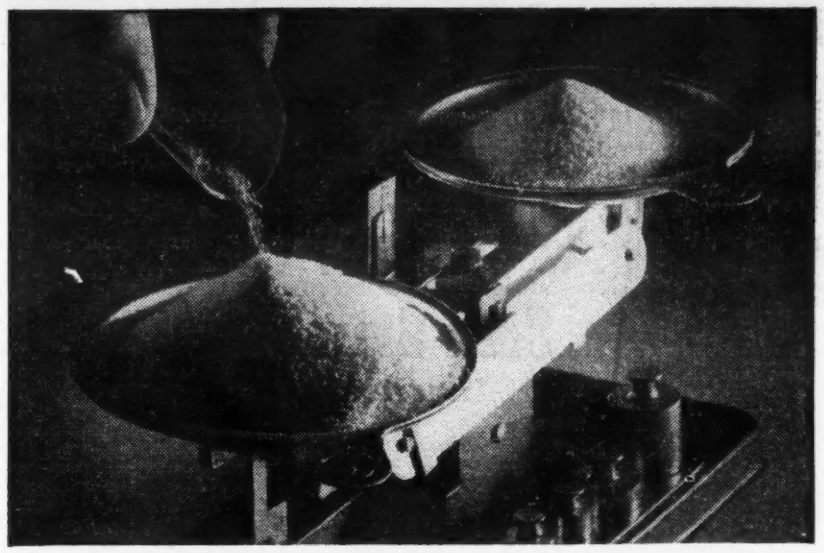
Celanese Plastics Unit

—*Continued from page 3*

according to Celanese, as to tax the plant's ability to meet customers' needs.

A recent and rapid shift by makers of liquid household detergents from cans to linear polyethylene containers has been one of many factors in the piling-up of demand, Celanese says.

The plastics—owing to its stiffness, high heat-resistance, and toughness—is finding broadening markets in such other end uses as toys, housewares and industrial parts, the producer reports.



Put 30% more bulk into your detergents with spray-dried phosphates

When we spray-dry sodium phosphates we come up with hollow, air-filled granules that are 70% bulkier than conventional phosphates. Sodium tripolyphosphate and tetrasodium pyrophosphate are available in spray-dried forms.

Use this form in your detergents and you can gain from 20% to as much as 30% more bulk without adding a penny to your cost.

Dissolve faster Shea® spray-dried sodium tripolyphosphates dissolve two to three times faster than conventional forms, since they have so much more surface area.

No bridging or caking The air content of Shea phosphates keeps them loose and free flowing at all times. *Shea sodium tripolyphosphate is 97% to 99% pure—highest in the industry.* For more information on these spray-dried products or other Shea phosphates, write to the address below.

Disodium phosphate, trisodium phosphate, sodium hexametaphosphate, and sodium tripolyphosphate are available in conventional density, granular form.

HOOKER CHEMICAL CORPORATION
PHOSPHORUS DIVISION, DEPT. OP-12
60 E. 42nd Street, New York 17, N. Y. • MUrray Hill 2-2500

HOOKER CHEMICALS PLASTICS

INDUSTRIAL CHEMICALS

Philipp

QUALITY in QUANTITY —at prices that are always competitive!

a new source for

ZINC SULPHATE

Available for immediate delivery at all times . . . . from warehouse stocks, at attractive prices.

for agriculture

SPECIALLY FORMULATED FERTILIZERS
COPPER SULPHATE CRYSTALS
COPPER SULPHATE BASIC
DDT • UREA • MURIATE OF POTASH
SUPERPHOSPHATE Single & Triple
SYNTHETIC DETERGENTS • AMMONIUM SULPHATE
DICALCIUM PHOSPHATE • ANHYDROUS AMMONIA
NITROGEN SOLUTIONS

BOSTON 10, MASS.
PORTLAND, CONN.
PROVIDENCE 3, R. I.
PHILADELPHIA 6, PA.
BALTIMORE 1, MD.
CHICAGO 1, ILL.

Philipp Brothers Chemicals, Inc.
COLISEUM TOWER BUILDING
10 COLUMBUS CIRCLE · NEW YORK 19, N. Y. · JU 6-6020

SODIUM SILICOFLUORIDE
OLIN MATHIESON CHEMICAL CORPORATION
BLOCKSON
BLOCKSON CHEMICAL COMPANY · Joliet, Ill. · Division of Olin Mathieson Chemical Corporation

Manufacturers of
Red and Black **COPPER OXIDE**
COPPER SCALE
ROBERT A. COUPE, 260 Rhode Island Ave., PAWTUCKET, R. I.
Telephone PAwtucket 3-4944

For specifications and prices, write
KAWECKI CHEMICAL CO.
220 East 42nd Street, New York 17, New York
Exclusive Sales Agents For
SMITH-DOUGLASS COMPANY, INC.
5100 Virginia Beach Blvd., Norfolk, Va.
LARGEST PRODUCER OF KSF IN THE UNITED STATES
SD CHEMICALS

Chemical Buyers Arrange Mid-Winter Meetings Theme

"Chemical Buyers Prepare for the '60's"—highlighted by a workshop study of the purchase of chemical "X"—is the theme set for two mid-winter meetings slated by the chemical buyers group of the National Associations of Purchasing Agents.

Meetings will be held January 27-28 at the Pick-Congress hotel in Chicago and February 3-4 at the Commodore hotel in New York.

Topics and speakers to be featured at both meetings include "Planning for Economic Growth in the 60's" by Peter Hoguet, president of the Econometric Institute; "The Changing World Chemical Industry and It's impact on the Chemical Buyer," C. S. Dennison, International Minerals & Chemicals Corporation; and "Legal Aspects of Trade Relations," R. R. MacIver, Columbia-Southern Chemical Corporation.

A talk on "Training and Professional Development" by John Hoagland, Michigan State University, is slated for the Chicago meeting only.

In the workshop, ten experienced panelists, will match wits with volunteers from the floor in solving the practical problems involved in buying chemical "X." Practical techniques, rather than theory, will be called into play, according to the meeting committee's advance program.

Panel leaders will be briefed by Fred Schmitt, director of purchases of Merck & Co.

DuPont Shifts Personnel In Its Fabrics Department

E. I. duPont de Nemours & Co., Wilmington, Del., has advanced Max N. Nickowitz to the post of staff assistant to the fabrics and finishes department's general manager.

Named to succeed Mr. Nickowitz as director of sales for fabrics is William E. Kreuer, who, in turn, will be succeeded by William D. Lawson as assistant director of sales for finishes.

Mr. Lawson's post, that of assistant director of research devolves upon John A. Klaesmann, whose post, that of director of fabrics and finishes research laboratory of the company's Wilmington, Del., experimental station, goes to Dr. Orville H. Bullitt, jr.

Chemicals Out of Reactor

—Continued from page 3

zation of the fragment recoil energy of nuclear fission. Recoil energy constitutes about 80 percent of the total fission energy. Normally, this energy is absorbed in the fissionable fuel and its container. In special types of nuclear reactors with finely divided fuel, however, this energy is available for chemical transformation. After the chemical synthesis, most of the energy is still available for electrical or thermal power generation.

The company believes the reaction is applicable to a wide range of organic chemicals. In general, however, it was found that chemicals of lower molecular weight tend to give higher yields of easily separable products. For example, yields of over 65 percent of ethylene glycol have been obtained from methanol using the Hercules process. Methanol is currently selling at about 4 and one-half cents per pound, and ethylene glycol at about 14 cents per pound.

Sponsors 18-Month Project

The company has sponsored an eighteen-month laboratory project, carried out at Batelle Memorial Institute, which confirms and extends the work done by Hercules scientists.

Hercules has done considerable work creating a preliminary design for the new type of nuclear reactor, in which fission recoil energy can be utilized.

An extensive reactor development program will be necessary to demonstrate the safety and efficiency of the new type of nuclear reactor, and to confirm preliminary cost estimates. Hercules has been discussing its research results with the Atomic Energy Commission for a year and a half in an effort to define the problems to be solved in the reactor development program. AEC has initiated preliminary reactor studies at Brookhaven National Laboratory which will be concerned in part with features of the Hercules design. Hercules experts are serving as consultants on the AEC-Brookhaven study.

Spearmint Crop Gain

—Continued from page 5

vested 42,200 acres. The nine-year averages are 1,794,000 pounds produced, forty-one pounds per acre and 43,300 acres harvested, respectively.

The spearmint crop summary is as follows: 687,000 pounds of oil produced from an average yield of fifty-seven pounds per acre on 12,100 acres.

Last year the comparable figures were 484,000 pounds produced, forty-seven pounds per acre and 10,200 acres harvested. For the nine-year average the figures are 597,000 pounds produced, thirty-eight pounds per acre and 15,780 acres harvested.

Gulf Oil Elects Brockett Executive Vice President

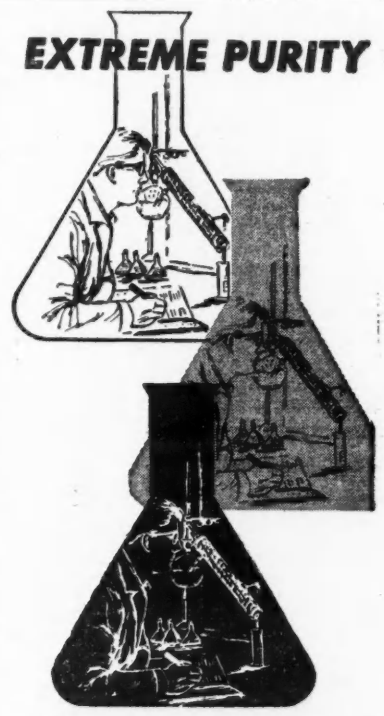
Gulf Oil Corporation, Pittsburgh, Pa., has elected E. D. Brockett executive vice-president, the appointment to take effect January 1.

Since mid-1958, Mr. Brockett has been president of British American Oil Company, Ltd., with headquarters in Toronto. He was elected a vice-president of Gulf Oil and placed in charge of Houston, Tex., operations in 1955. Two years later he returned to the company's headquarters as coordinator of production on a world-wide basis.

Allied Advances Reynolds

Allied Chemical Corporation has appointed Robert L. Reynolds director of sales for the plastics and coal chemicals division. Mr. Reynolds has been manager of the sales department's organic chemical section since 1956. Previously he was assistant director of sales for Allied's Solvay Process Division.

EXTREME PURITY



DELHI-TAYLOR TRIPLE-TESTED AROMATICS

Delhi nitration grade Benzene and Toluene and Delhi Xylenes have set a new standard in purity and uniformity. They are sulfur and thiophene-free with remarkably low paraffin content.

Delhi-Taylor keeps a careful watch over product purity through its unique "Triple-Testing" procedure.

The first test is made on-stream where rigid process control standards are maintained; the second test is made in storage to make certain that the product maintains its high quality during storage; the final test sample is taken from the barge or tank car before it is released to the customer.

This strict quality control formula is your assurance that Delhi-Taylor aromatics will readily meet the most stringent specifications.

DELHI TAYLOR
CHEMICAL DIVISION
DELHI-TAYLOR OIL CORP.
415 Madison Ave. • New York 17, N.Y.

Petroleum Derivatives

Despite the rapid return to production of the steel mills, the adverse affects of the strike are still being felt in the petroleum derivatives market. Solvent demand in the metal fabricators and in industrial lacquer finishing has caused long supply positions in the cases of toluene, xylene, and slowed the demand for hexane and mineral spirits. The effect on benzene has been quite the opposite. The tight supply was one reason for the recent price increase adopted by the benzene producers. Benzene bought on spot had been moving in the range of 40 cents a gallon in some areas and this combined with the price reduction of last summer helped raise the price of benzene to 34 cents a gallon, effective January 1. Most producers feel that the tightness in the supply of benzene will be a problem until well into the second quarter of 1960.

The aliphatic solvents are routine this week, supplies are ample and price structures are firm with no likelihood of change. The higher boiling aliphatics used in trade sale paints are holding up well. Hexane demand is well sustained as vegetable oil solvents continue to take their share of this market.

Production of crude petroleum in the United States averaged 6,855,000 barrels per day in September, an increase of 90,000 barrels per day over the August average of 6,766,000 barrels per day, reports the Bureau of Mines. Crude production in the first nine months of 1959 averaged 462,000 barrels per day greater than in the same period of 1958. During September most major producing States recorded moderate changes in production from the previous month. The greatest changes during the month were increases of 36,000 barrels per day in Texas and 17,000 barrels per day in Kansas.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
103.04	103.04	103.04	104.54

For Current Prices See Page 9

January 1 Price Advances

Benzene, 3c. per gal.

Aromatic Solvents

Benzene—The new price of benzene became market-wide when the cokeoven producers met the advance of the petroleum industry. Effective January 1, the new price of benzene will be 34 cents a gallon.

The tight supply of benzene is still the main feature of the market, and is likely to be around for some time. A while ago most sources felt that with the end of the steel strike, more than enough benzene would be around. Now the feeling is that it will be the second quarter of next year before the tightness in the benzene picture can be eased. Spot benzene continues to bring premium prices with little sign of improvement in the near future.

Toluene—The long supply position existing in this market has not yet felt the increase in solvent demand that was anticipated with the easing of metal shortages. As the automotive industry resumes production, some of the excess toluene should be drawn off by an increase in demand from this source.

Exports of toluene during the first ten months of 1959 are down from the 1958 level. This has added to the long supply position of toluene and the occasionally large shipment of export toluene only manages to have a temporary alleviating effect on this condition. As a result much of toluene is let run into gasoline.

Xylene—Stocks of xylene are plentiful and have been since the steel strike. With the return to operation of the metal fabricators there should be an increase in the demand for xylene. The long supply position will continue to be a problem for producers until the middle of next year and then it is anticipated that no great reversal in the supply picture will result.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended December 5 totaled 252,613,000 barrels, according to data reported by the Bureau of Mines. Compared with the total of 252,665,000 barrels the preceding week, this represents a decrease of 52,000 barrels comprising a decrease of 272,000 barrels in stocks of domestic crude and an increase of 220,000 barrels in stock of foreign crude.

Aliphatic Solvents

Hexane—Demand for vegetable oil solvent extraction is well sustained. Diluent uses in industrial lacquer finishing are beginning to pick up as the effects of the steel shortage wear off. Prices are firm and unchanged.

Mineral Spirits—There are ample supplies available in all areas. Demand from the paint trade is steady at good volume. The metal scarcity, which has resulted in cutbacks in housing, combined with the usual decline in paints during the year-end months has brought about a lessening in demand from the paint trade. The odorless mineral spirits are doing well due to the increase in interior painting that comes with the colder months.

LPG's

Total production of LP gas for the period November 16 to 30 was 335,073,000 gallons. This compares to the 1958 figure of 305,591,000 gallons. Output of LR gas for the last two weeks of November was 123,955,000 gallons, an increase from the reported amount of last year when production was 110,163,000 gallons, according to the American Petroleum Institute.

Total inventories of LP gas (at plants, terminals and underground) for the period ending November 30 was placed at 934,612,000 gallons. Stocks of LR gas at refineries was reported at 110,874,000 gallons.

Butane—According to the API, production of this gas for the period November 16 to 30 showed an increase from the corresponding period last year. LP output was 78,453,000 gallons while refinery production stood at 17,229,000 gallons for the same period.

Propane—LP production of this gas between November 16 to 30 of this year was reported by the API as totaling 166,466,000 gallons, as against the 155,897,000 gallons produced during the same period last year. Output from refineries for the last two weeks in November was placed at 76,618,000 gallons, an increase from the 1958 figure of 71,574,000 gallons, reports the API.

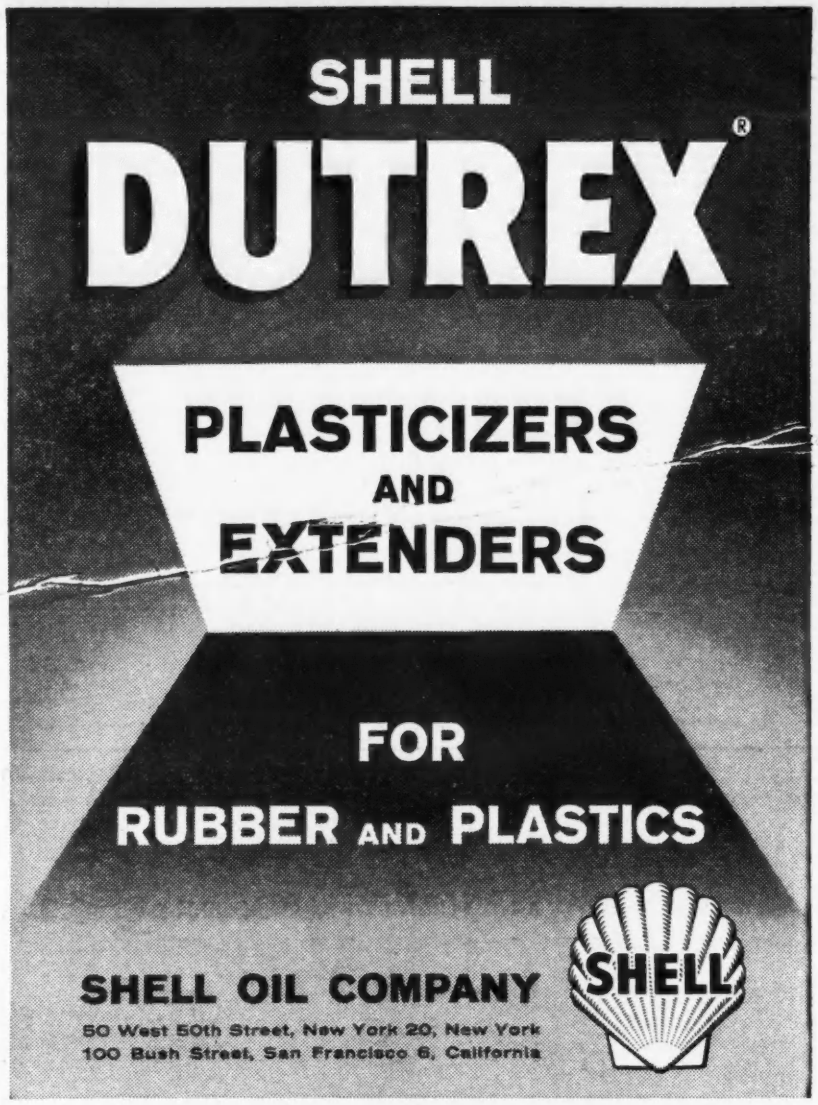
Waxes

Paraffin—Demand continues to be well sustained on crude scale and refined grades. Export volume is holding up well. Food packaging and other paper coatings comprises a large volume of the demand for crystalline and microcrystalline grades. Despite the use of synthetic materials, consumption of microstalline waxes continues to run at capacity levels. There is a danger of serious shortages in the future unless the petroleum industry can expand existing production facilities to keep up with the constantly growing demand.

Miscellaneous

The API estimates that the daily average production of crude oil and lease condensate for the week ended December 4 was 7,026,525 barels.

Reports received from refining companies indicate that the industry as a whole ran to stills on a Bureau of Mines basis approximatey 7,983,000 barrels of crude oil daily and produced 28,772,000 barrels of gasoline; 2,600,000 of kerosene; 13,168,000 of distillate fuel oil and 6,713,000 of residual fuel oil during the week; and had in storage 181,406,000 barrels of finished and unfinished gasoline; 30,351,000 of kerosene; 164,093,000 of distillate fuel oil and 53,898,000 of residual fuel oil on December 4, 1959.



CHEMICAL FORECAST 1964

AROMATIC SOLVENTS
Benzene • Toluene

NITROGENATES
Urea • Ammonia

POLYMER CHEMICALS
Vinyl Resins • Polyethylene Resins • Styrene-Butadiene Synthetic Rubber

THE ALCOHOLS
Ethyl Alcohol • Methanol

ETHYLENE CHEMICALS
Ethylene Oxide • Ethylene Glycol • Diethylene Glycol

INORGANIC CHEMICALS
Caustic Soda • Chlorine

MISCELLANEOUS ORGANICS
Phenol • Detergent Alkylate • Formaldehyde

28 Statistical Tables and 19 Charts

$2.25

Oil, Paint and Drug Reporter
Reprint Department
30 Church Street, New York 7, N. Y.

Only Procter & Gamble supplies GLYCERINE from 9 plants across America!

Producing a steadily increasing supply of natural GLYCERINE to fill your needs.

FOR INFORMATION WRITE:
Procter & Gamble, Cincinnati 1, Ohio
or 640 Fifth Avenue, N. Y. 19, N. Y.

LEVER BROTHERS COMPANY
Producers and Refiners of
NATURAL GLYCERINE
390 Park Avenue New York 22, N. Y.

RANEY CATALYST CO., INC.
Originators and Dependable Suppliers of
RANEY CATALYSTS
1322 Hamilton National Bank Bldg.
Chattanooga 2, Tenn.
Since 1925 Phone: Amherst 6-8616, Taylor 1-7823 Cable Address: RANI

Greeff
SERVING THE CHEMICAL INDUSTRY SINCE 1880
Merry Christmas
R. W. GREEFF & CO., INC.
10 ROCKEFELLER PLAZA, NEW YORK, N. Y.
TRIBUNE TOWER, CHICAGO, ILLINOIS

Aliphatic Organics

A major producer announced price reductions in propylene oxide and propylene glycols last week. Oxide was reduced 1 cent per pound across the board. Propylene glycol, technical and USP, declined 1 cent per pound in tankcar and carload lots. Less carload quantity was lowered ¾ cents per pound. On dipropylene glycol, the tankcar price declined 1 cent and carload and less carload lots dropped ¾ cents per pound. Tripropylene glycol was reduced 1 cent in tanks, while carload and less carload quantity was reduced ½ cent per pound.

A major producer reported the price of acrylonitrile will be reduced 3.49 cents per pound across the board, effective January 1. This marks the second decline in acrylo this year, the last having been a 0.51 cents reduction put into effect September 1. New price in tankcars will be 23 cents per pound.

Effective January 1 furfuryl alcohol will be reduced 1 cent per pound. Tankcar listing of 17½ cents per pound, f.o.b., Memphis, Tenn., will be the lowest in history for this material. Makers of fermentation and synthetic n-butyl alcohol will raise prices ½ cent per pound on January 1. n-Butyl acetate remains unchanged.

The increase in butyl alcohol will raise the differential between it and isobutyl alcohol. Sources reporting last week indicated they had no plans to increase isobutyl alcohol prices, however.

Price Trends

Advanced
None

Reduced
Dipropylene glycol, tanks, 1c. per lb. c.l., l.c.l., ¾c. per lb
Propylene glycol, tech and USP, tanks, c.l., 1c. per lb.
l.c.l, ¾c per lb.
Propylene oxide, 1c. per lb.
Tripropylene glycol, tanks, 1c. per lb. c.l., l.c.l., ½c. per lb.

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
132.90	132.95	132.95	130.73

For Current Prices See Page 9

January 1 Price Changes

Advances
n-Butyl alcohol, syn. and fermentation, ½c. per lb.

Declines
Acrylonitrile, 3.49c. per lb.
Furfuryl alcohol, 1c. per lb.

A major rubber producer will boost capacity to produce vinyl resins at Painesville, Ohio, by 30 percent. The expansion will boost capacity at the plant to 65 million pounds, the company said.

Acrylonitrile — Effective January 1, acrylonitrile will be reduced 3.49c. per pound across the board.

Under new schedules tankcar listing will be 23c. per pound; carload or truckload of drums, 26c. per pound; less carload or less truckload in drums, 27c. per pound. Prices are on a frt. equald. basis.

The new listings compare with the currently held quotations of 26.49c. per pound in tankcars, 29.49c. per pound in carload or truckload of drums and 30.49c. per pound in less than carload or less than truckload drum quantities.

The last change in this market was a 0.51c. per pound across the board reduction put into effect September 1 of this year.

Tariff Commission reported production in the first ten months of this year amounted to 171.4 million pounds. Output in 1958 was 180 million pounds.

n-Butyl Acetate—A ½c. per pound advance in the price of n-butyl alcohol goes into effect January 1. No changes are contemplated on n-butyl acetate, sources report.

Price on acetate in tankcar or tanktruck is 14½c. per pound; carload or truckload of drums, 17c. per pound and less carload in drums, 18½c. per pound.

n-Butyl Alcohol—Makers of fermentation n-butyl alcohol met the ½c. per pound advance in synthetic material reported two weeks ago. Effective January 1, 1960, fermentation and synthetic material will be priced at 15½c. per pound in tanks, 18c. per pound in carload and 19½c. per pound in less carload lots. Prices on fermentation alcohol are quoted on a freight allowed basis, while synthetic material is on a delivered basis.

Synthetic sec-butyl and tert-butyl alcohols are unchanged at levels of long standing.

Dipropylene Glycol—A major producer announced a 1c. per pound reduction in tankcar price of dipropylene glycol. Carload and less carload price were reduced ¾c. per pound.

New price in tankcars is 14¼c. per pound; carload of drums, 17c. per pound; less carload drum lots, 18½c. per pound. Prices are on a freight allowed basis.

Epichlorohydrin—Price was steady and unchanged after a 3c. per pound across the board reduction the first of last month.

Tankcar listing is 27c. per pound; carload in drums, 29½c. per pound and less carload in drums, 31c. per pound. Prices are on a delivered basis.

Epoxy resins outlet remains as the major market for epichlorohydrin. Demand in this quarter is reported good. Stocks are fully adequate.

Formaldehyde—Output in the January through September period amounted to about 1.25 billion pounds (37 percent by weight). Resin business has remained fairly active, although some sources have noted the usual year-end slackening in the business pace.

Growth in established formaldehyde based plastics has continued at a steady pace, sources report. Prices are unchanged from last report. Last change was the ¼c. per pound advance in formaldehyde put into effect in July of this year.

Furfural—Technical material continues unchanged at 12c. per pound in tankcars delivered East. Tanks, delivered West, are quoted at 13c. per pound. Carload of drums, works basis, are 13c. per pound and less carload drum quantities list at 14c. per pound.

A producer announced at 1c. per pound reduction in the price of furfuryl alcohol to be effective January 1.

Furfuryl Alcohol—Prices will be reduced 1c. per pound across the board, effective January 1, 1960.

Under new schedule tankcar price will move from 18.4c. to 17.5c. per pound; carload or truckload of drums, 19c. per pound and less carload or truckload drum lots, 20c. per pound. These prices are f.o.b., Memphis, Tenn.

At Newark, N. J., material will be newly priced in carload or truckload quantity at 20½c. per pound, while less carload and less truckload drum lots will be 21½c. per pound. Less than drum lots at this shipping point will be 28½c. per pound.

At Oakland, Calif., less carload and less truckload drum lots will be priced at 23½c. per pound. Less than drum lots, f.o.b., Cedar Rapids, will list at 28c. per pound.

In making the price announcement, it was pointed out that improved production techniques at the Memphis plant have made lower prices possible.

Furfuryl alcohol finds use as a resin ingredient, chemical intermediate and solvent.

Isobutyl Alcohol—The ½c. per pound boost in the price of n-butyl alcohol, slated for January 1, will increase the price differential between these two items. However, sources reporting last week indicated they had no plans for raising the isobutyl price.

In July of this year both n-butyl and isobutyl alcohols advanced ½c. per pound.

Itaconic Acid —Refined itaconic acid in bags, carload, works basis, is unchanged at 53½c. per pound. Less carload, same packing, same basis, is 54½c. per pound.

Technical material is quoted at 38½c. per pound, bgs., c.l., works. Less carload quantity lists at 39½c. per pound, same packing, same basis. Demand is routine, supply fully adequate.

Methanol—Movement is being maintained at a steady pace, sources report. Formaldehyde market has been bearing up well considering the slackening business pace in the fourth quarter. All through the fall months sources have expressed surprise that the long steel strike has not cut deeper into plastics markets.

Methylene Chloride—Market is unchanged. Outlet to paint remover and stripping compounds has been somewhat

Aliphatic Organics

depressed in recent months. However, the overall tone of the market appears good. Growth has been steady and yearly output is estimated at better than 80 million pounds annually.

Chlorination of methane, in producing this material, yields about 80 percent methylene chloride with the balance in carbon tetrachloride and chloroform.

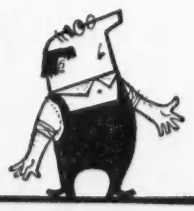
Molasses—Markets for feeding cane molasses were mostly steady during the week, according to Department of Agriculture report. Demand was moderate to slow throughout the country. Some sources indicate that buyers had previously purchased most of their molasses requirements until after the Christmas holiday. Shipments were slower.

Louisiana sugar mills ground 779,988 tons of sugarcane through the first week in December. This brings the total cane ground for the 1959 season through December 5, to 4,790,693 tons.

Cuba may set a 1960 sugar production maximum of 5.5 million Spanish long tons, it is reported.

Distillation Products Industries seeks inquiries from companies with production problems involving the manufacture of compounds not generally available in the quantity or purity required. We are equipped for and experienced in synthesis on a custom basis. This service is offered for quantities in the larger-than-laboratory-but-less-than-tankcar range. Please address *Distillation Products Industries,* Eastman Organic Chemicals Department, Rochester 3, N. Y. (Division of Eastman Kodak Company).

DPi



Oxalic Acid—Schedules are maintained unchanged at previous quotations. Carload, bgs, f.o.b., works is $18 per cwt., while drum price, same quantity, same basis, is $18.50 per cwt.

Demand for oxalic moving to the textile and tanning industry has remained steady to brisk throughout the year. As one observer pointed out, "Consumerwise and processingwise the market has been strong this year."

Methyl Ethyl Ketone—Tankcar price lists at 12½c. per pound, while carload or truckload of drums is 15c. per pound and less carload quantity is 16½c. per pound.

n-Propyl Alcohol—Price is 11½c. per pound in tankcar or tanktruck quantity; 14c. per pound in carload or truckload of drums and 15½c. per pound in less carload drum lots.

Propylene Glycol—Prices on technical and USP propylene glycol in tankcar and carload quantities were reduced 1c. per pound, a major producer reported. In less than carload quantity both grades were reduced ¾c. per pound. Prices are on a delivered East basis.

New price on technical material in tankcar is 12½c. per pound; carload of drums, 15c. per pound; less carload drum lots, 16¾c. per pound.

USP propylene glycol in tankcar quantity is newly quoted at 14½c. per pound; carload of drums, 17c. per pound; less carload drum lots, 18¾c. per pound.

September production of propylene glycol amounted to 14.8 million pounds in September as against 15.7 million in July, according to report of the Tariff Commission. August production figure was not available.

Propylene Oxide—A major producer announced a 1c. per pound across the board reduction in the price of propylene oxide.

Under new price schedules, tankcar price is 14½c. per pound, carload of drums, 17c. per pound and less carload drum lots 18½c. per pound. Prices are on a delivered basis in the East.

Sorbitol—Last price change in this market was the 1¼c. per pound advance in tankcar quantity of NF 70 percent aqueous sorbitol put into effect November 1. Carload and less carload lots were increased 2c. per pound at that time.

Grades other than NF have been unchanged for many months. Stocks are adequate, demand routine.

Sucrose—Department of Agriculture announced a proposed revision of requirements that must be met to import sugar or liquid sugar into the continental United States.

One of the proposed changes would require prior authorization by the Sugar Division, Commodity Stabilization Service, at all times before sugar from any area or country may be released by Collectors of Customs for consumption in the United States. Under the present regulation sugar from certain areas may be released by Collectors of Customs early in the year without prior authorization by the Sugar Division.

The proposal is contained in the Federal Register for December 9. Interested persons are invited to submit written data, views or arguments regarding the change to the Director of the Sugar Division not later than December 19.

Thiourea—Demand remains routine. Material is readily available for prompt shipment. Material finds use in the production of pharmaceuticals and as an intermediate in organic syntheses.

Price on truckload lots of technical thiourea in bags is 30c. per pound; ton lots, 32c. per pound; less than ton lots, 33c. per pound.

Tripropylene Glycol—Price was reduced 1c. per pound in tankcar quantity, while carload and less carload quantities declined ½c. per pound.

Tripropylene glycol in tanks is newly priced at 17½c. per pound; carload of drums, 20½c. per pound and less carload drums lots, 22c. per pound. Prices are on a freight allowed basis in the east.

FDA Gets Tolerance Bids From Union Carbide, Niagara

Tolerances of ten parts per million for residues of the pesticide chemical 1-naphthyl N-methyl carabamate in or on eggplants, peppers, tomatoes and bananas, are proposed in two petitions filed with the Food & Drug Administration under the pesticide control law last week. The petitions were filed by Union Carbide Chemicals Company, New York.

Niagara Chemical division of Food Machinery & Chemical Corporation, Middleport, N. Y., filed a petition proposing a tolerance for residues of 2,4,5,4'-tetrachlorodiphenylsulfone in or on a number of fruits.

ORGANIC PEROXIDES

MERRY CHRISTMAS

LUCIDOL DIVISION

WALLACE & TIERNAN INCORPORATED
1740 MILITARY ROAD, BUFFALO 5, NEW YORK

CHLORINATED SOLVENTS

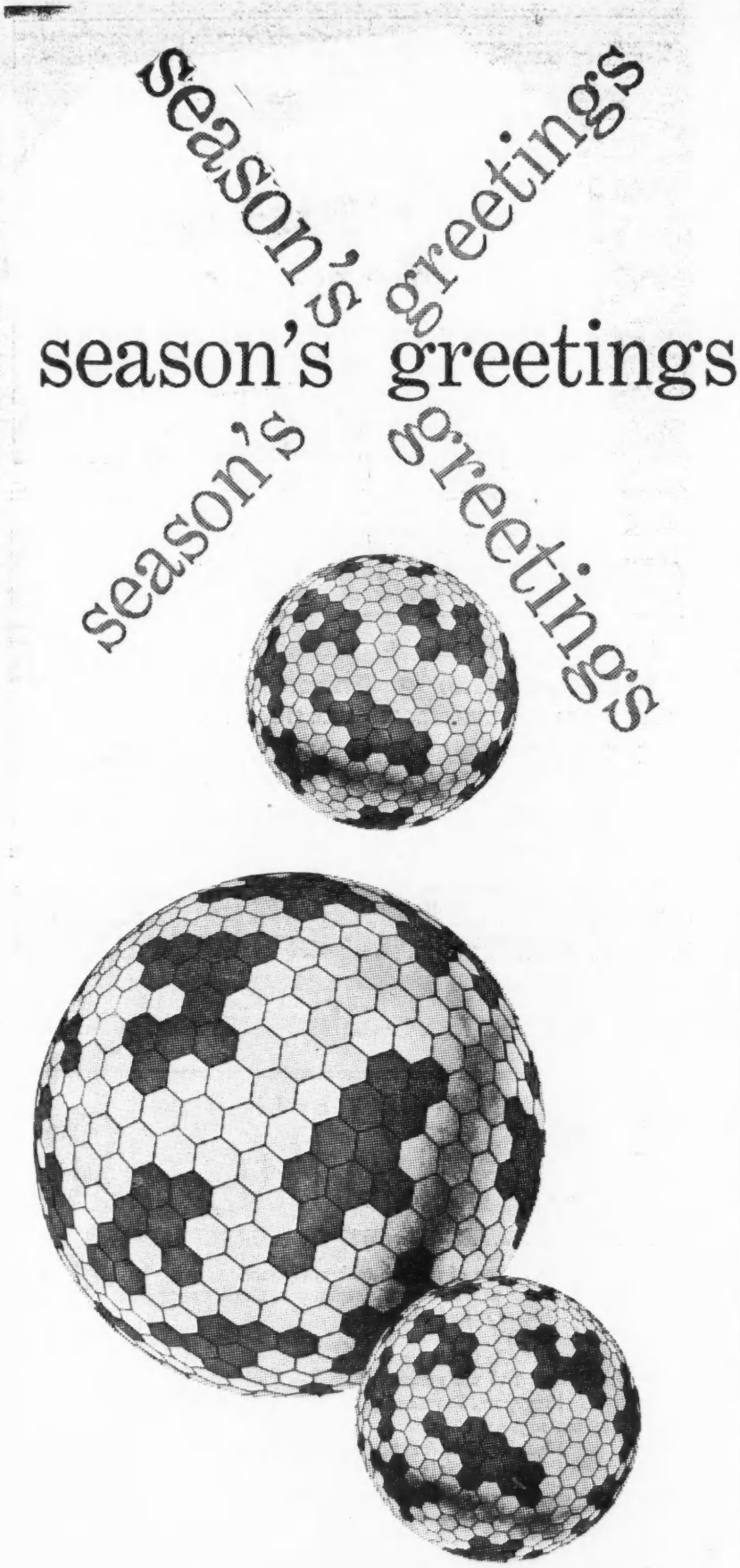
Perchlorethylene • Methylene Chloride
Trichlorethylene • Carbon Tetrachloride
IMPORTED FROM WESTERN EUROPE • BULK STOCKS AT ELIZABETH, N. J.
INTERNATIONAL PETROSOLVENTS, INC.
155 East 44th St., New York 17, N. Y.
Tel: YU 6-6464

Have you tried JEFFERSON CHEMICAL'S NEW ETHYLENE OXIDE?

IN BULK — DRY or LIQUID
CHEMICAL
TRANSPORT SERVICE TO MOST OF THE UNITED STATES

- A complete line of modern tank equipment!
- Thru-service with two-man, sleeper-type diesel power units
- Portable pumps and accessories
- 28 terminals
- Units available within hours
- *Call collect* to our general office:

Kingsport, Tennessee • Phone: Circle 5-3191
or our regional offices:
New York, N. Y. • Phone: Secaucus, N. J.—UNion 6-1002
Chicago, Illinois • Phone: LUdlow 2-5100
Charleston, W. Va. • Phone: WAlnut 5-4701



Tar Acids and Tar Acid Oils
Phenol
Phthalic Anhydride • Maleic Anhydride
Fumaric Acid • Phthalonitrile
Plasticizers
CUMAR® Resins
Rubber Compounding Materials
"A-C" Polyethylene Lubricants
Naphthalene • Anthracene
Tar Bases • Tar Distillates
Niacin (Nicotinic Acid)

Acetone • Acetophenone
Alpha-Methylstyrene
Cumene • Glycols
Ethanolamines
Aromatic Industrial Solvents
Ethylbenzene
Flotation Agents
Pickling Inhibitors
Industrial Tar Products
PLASKON® Plastics and Resins

PLASTICS AND COAL CHEMICALS DIVISION
40 Rector Street, New York 6, N. Y.

Allied Chemical

Coal Chemicals

Technical grade styrene monomer will advance fractionally on January 1, in line with contract escalation clauses. Tankcar price will move up from 12.08 cents per pound to 12.17 cents. New price in carload or truckload will be 14.67 cents, while less carload or truckload will be 16.67 cents per pound. Polymer grade was unchanged. Most producers were standing pat on 2,6-di-tert-butyl-p-cresol prices. One maker has slated an 11 cent per pound advance in technical grade and 10 cents on feed and food grade for January 1.

A major steel producer announced expansions of coaltar distillation capacity at Fairfield, Ala., and Clairton, Pa. The Fairfield unit is to be increased by more than 100 percent, the company said. The increase will make available more naphthalene, creosote and tar acids. The new facility at Clairton will consist of two 100-foot high independent continuous distilling units.

A producer will enlarge phenol capacity at Tuscaloosa, Ala., by one-third. The expansion will bring phenol capacity at the plant up to 90 million pounds annually, the company said. The same company is expected to bring in a 60 million pound phthalic anhydride unit at Newark, Ohio.

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
118.45	118.45	118.45	118.49

For Current Prices See Page 9

January 1 Price Changes

Advances
Benzene, tanks, 3c. per gal.
4-Chloro-2-nitroaniline, tech., dms., 6c. per lb.
m-Nitrotoluene, 5c. per lb.
p-Phenylenediamine, 15c. per lb.
Styrene monomer, tech., 9.100c. per lb.
m-Toluidine, 4c. per lb.

Declines
Fumaric acid, c.l., t.l., 4½c. per lb. l.c.l., l.t.l., 4c. per lb.
Maleic anhydride, t.c., c.l., t.l., 5¼c. per lb. l.c.l., l.t.l., 4¾c. per lb.

Chemical salesmen continue to lament the "warping" of demand patterns due to the freak situation induced by the steel strike. No one cares to make any serious predictions about the new year, although it is generally felt that the first half should be a boom period. Any valid predictions, it is felt, should await settlement of the strike and at least a three month breathing spell afterward.

The American Iron and Steel Institute estimated that steel production in the week ended December 20 would amount to 96.4 percent of theoretical capacity equivalent to 2,729,000 net tons of steel. Output in the week previous was 2,732,000 tons, 2,233,000 in the comparable week one month ago and 2,011,000 net tons in the corresponding week one year ago.

Basic Products

Benzene—Sources report little change in demand patterns. Ordinarily, announcement of a price advance would set off a flurry of hedge buying. In this case, buyers have been conditioned to short supplies for many weeks and some have paid well above the proposed 34c. per gallon price for spot lots when they were available.

The return of cokeoven material to the market a month ago has given some relief, but only for immediate needs. Consumers have not been able to build any inventory since the pre-strike period. Unless the strike is settled before the end on the injunction period, observers foresee an even more serious setback in the months ahead. On the other hand a settlement in the steel industry and high cokeoven operating rates in the first half of 1960 would bring the supply-demand picture in balance probably by the middle of the year.

Creosote—Sources report routine movement to railroad outlets. Price has been unchanged since the 2c. per gallon advance recorded by major producers last April.

p-Cresol — High-purity p-cresol remains at 49c. per pound in tankcar quantity; 52c. per pound in carload or truckload of drums and 53c. per pound in less than carload drum lots.

Market demand has been very brisk with producers well sold ahead. A major producer has been pushing production to the limit to supply the market after having been down for many weeks due to a prolonged strike at its midwest plant.

Cresylic Acid—The market is steady. Producers report routine withdrawals. Prices long in effect in the trade are unchanged.

Volume of cresols and cresylic acids, ADF, entering the country in the first ten months of this year amounted to 1.7 million gallons, approximately 0.7 million more than in the ten month period of last year.

Production of refined cresylic acid from all sources amounted to 43 million pounds through September, about 10 million more than for the ten month period last year.

These two factors, increased domestic production to cope with the normal increase in demand after the '58 recession year, and the upturn in imports this year, have helped to keep the supply-demand picture in fair balance, it is said.

Naphthalene—Small lots of import naphthalene continue at about 11c. per pound, c.i.f., out of reach of consumers in this market.

Petroleum naphthalene is expected to make an increasing impact in the market. One company has already announced that it would build a plant at Buffalo to produce benzene and naphthalene. Another petroleum firm may get into the business with a unit at Toledo, Ohio. Possible capacity of this plant for naphthalene has been rumored at 75-100 million pounds per year.

Last week a major steel company announced expansions in tar distilliing capacity at Fairfield, Ala., and Clairton, Pa. The facility at Clairton will include two 100-foot high independent, continuous distilling units.

Phenol—A producer will expand phenol capacity at Tuscaloosa, Ala. The expansion will bring rated capacity at the unit up to 90 million pounds annually from 60 million pounds.

Toluene—The market is unchanged. Coaltar sources see little chance of an upward revision in prices, although petroleum producers have long been chafing at a 25c. per gallon, delivered price.

A producer recently announced that capacity for toluene diisocyanates would be increased to 25 million pounds per year at New Martinsville, W. Va. An expansion currently in the works at Houston, Tex., will add a $750,000 plant to one producer's stake in the isocyanates market Industry capacity for isocyanate production is estimated at better than 50 million pounds per year.

Isocyanates, which go into polyurethane foams, are felt to hold good potential as a toluene outlet.

A producer's expansion plans at Fords, N.J., call for the doubling of current capacity to produce chlorotoluenes. A new process will be used to produce such derivatives as p-chlorbenzyl chloride, o-chlorobenzaldehyde and ortho and p-chlorobenzoic acids.

Intermediates

Acetanilide—Truckload or carload price is steady at 32½c. per pound, while less carload quote is 33½c. per pound. Market is routine, according to trade reports. Stocks are fully adequate for trade requirements.

Aniline—Production of aniline in Sep-

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ended December 20, was as follows:

Ammonia liquor	lbs.	968,267
Ammonium sulfate	lbs.	41,142,877
Benzene	gals.	3,788,134
Coaltar	gals.	22,507,973
Crude chemical oil	gals.	713,460
Toluene	gals.	917,306
Xylene	gals.	269,794

Coal Chemicals

tember amounted to 9,429,159 pounds as against 9,544,367 pounds in the previous month and 9,041,304 pounds in the comparable month last year. Output in the first nine months of this year was 96,838,598 pounds as compared with 69,070,352 pounds in the January through September period last year.

Bisphenol-A—Primary market outlet remains in epoxy resins with polycarbonates as a promising potential market. However, the latter is in the development stage.

Early November saw a rash of expansion and new construction announcements in this market. Sources point out that anyone with phenol and acetone is a logical entry.

2,6-Di-tert-butyl-p-cresol — Most producers were standing pat on prices which have been in effect since the sharp reduction on technical and food and feed grade material which occurred in June of this year.

However, one maker has slated an increase of 11c. per pound on technical and 10c. per pound on food and feed grade for January 1.

b-Naphthol—Technical, flake, material lists at 33c. per pound in carload or truckload of drums, while less carload lots, same packing, is 35c. per pound.

p-Phenylenediamine—As previously reported, this material will advance 15c. per pound to $1.55 as of January 1. Price has been steady at $1.40 to $1.42 per pound for many months.

Phthalic Anhydride — Market is unchanged. A development in phthalate plasticizers is the announcement of one integrated producer that dibutyl phthalate, di-iso-octyl phthalate and dioctyl phthalate prices will be raised January 1. DBP will advance 2c. per pound, while DIOP and DOP will advance 4c. per pound.

Major phthalate producers will stand by listings which have been in effect since February of this year.

Substantial import material has come into the market in recent months. Reports have indicated that some of this material is processed into end-products and re-exported. Thus, under a "drawback" clause a buyer of import phthalic for re-export would be entitled to partial rebate on duty paid on the phthalic. However, the shortage of phthalic anhydride has led to purchase of import material at premium prices for domestic consumption despite the severe squeeze on profit margins of PA and phthalate plasticizers.

Rubber Chemicals—Census Bureau report for October indicated export of rubber accelerators amounted to 344,846 pounds as against 419,192 pounds in the previous month. Export of antioxidants during the month was 732,288 pounds as compared with 1,102,644 pounds in September. Export of other rubber compounding agents totaled 256,474 pounds as opposed to 222,826 pounds in the previous month.

Rubber companies operated at peak levels all through the strike period after adequate preparation. A belated effect of the strike was felt in a shortage of bead wire which caused cutbacks to the extent that production is being scheduled to conform to immediate needs.

Usual practice in the rubber industry is to run two or three weeks on one type of tire, then a similar period on another type in order to maintain a well-rounded overall inventory. With stocks of finished steel coming through again this situation is expected to be restored by the first of the year.

Styrene Monomer — Effective January 1, price on technical styrene monomer will move up fractionally under contract escalation clauses.

New price in tankcar quantity will be 12.17c. per pound; carload or truckload of drums, 14.67c. per pound; less carload or less truckload drum lots, 16.67c. per pound.

Listing for polymer grade remains unchanged at 14½c. per pound in tanks, 17c. in carload or truckload and 19c. per pound in less carload drum lots.

A major producer recently announced a 200 million pound expansion program in styrene monomer which is to extend over the next two years. Expansions would seem to be in the cards as some sources report they have had no trouble in meeting commitments, but have been running neck and neck with inventories.

Output of monomer in the first ten months of the year amounted to more than one billion pounds, about 150 million ahead of the ten month period last year. Total for this year may run to 1.4 billion pounds, sources say.

October production of S-type synthetic rubber amounted to 93,451 long tons, according to figures released by the Census Bureau. Output of neoprene for the month was 10,099 tons and production of butyl type, 7,957 long tons.

The rubber companies have worked at a brisk pace throughout the year and since these consumers do not have the storage space or the desire to inventory large amounts of styrene, the material is believed to be going directly into finished rubber products.

Plastics based on styrene also show a steady upward growth trend. Total production of styrene resins in the first six months of the year outran last year by about 150 million pounds. Sales in the same period amounted to about 100 million more this year than last.

Pesticide That Will Kill

—Continued from page 5

more to make sure that they have a pure, wholesome product than the meat producers, particularly the cattle industry. Millions of pounds of meat are destroyed each year through our inspection service in order to meet the high standards that have been set. This has received little publicity. I am sure you will agree with me that it would be highly desirable to develop the kind of chemical or biological control agent the use of which could never be questioned.

"Already proposals have been made to increase funds greatly for the Food & Drug Administration to carry on substantially this type of research work. My own feeling, and I am sure you will concur, is that this is work that should continue to be done by the Department of Agriculture. Our agriculture research people have done superb work with the very limited funds they have had in the past. I would greatly appreciate having your views as to the plan of action set forth in this letter."

Republic Benzols

REPUBLIC STEEL

ALSO
SULPHATE OF AMMONIA
TOLUOLS
Nitration-Industrial
XYLOLS
Industrial
CRUDE NAPHTHALENE

Specify Republic Steel Containers for your Packaged Items

REPUBLIC STEEL CORPORATION
General Offices • Cleveland 1, Ohio
BRANCH OFFICES IN ALL PRINCIPAL CITIES
Shipping Points: Birmingham, Alabama • Canton, Ohio • Chicago, Illinois
Cleveland, Ohio • Gadsden, Alabama • Massillon, Ohio • Warren, Ohio
Youngstown, Ohio

CRESOLS
Orthocresol and Meta Para Cresol
CRESYLIC ACIDS • XYLENOLS
REINHART Chemical Corporation
CHRYSLER BUILDING, NEW YORK 17 N.Y. • YU 6-7092 • CABLE: RECHEMCORP

CRESYLIC ACID
DRUMS - CARLOADS
TANK WAGONS - TANK CARS
CONCORD CHEMICAL CO., INC.
Camden, New Jersey WOodlawn 6-1526

OPD
Quickest way to keep current on Chemical Costs

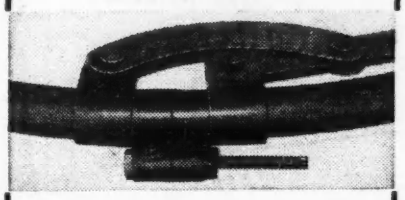
IF IT'S
PHENOL
YOU NEED... YOU CAN DEPEND ON DOW
CALL OUR NEAREST SALES OFFICE OR WRITE THE DOW CHEMICAL COMPANY, MIDLAND, MICHIGAN

Announcing—

LEVER-BOLT RINGS

FOR

FULL REMOVABLE HEAD DRUMS



Providing the convenience which has made the lever type ring so popular, and the positive security of the bolted ring which is so essential.

The only locking ring which combines both of these features.

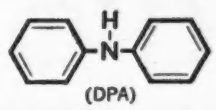
▼ ▼

Write for particulars on this latest development in barrel locking rings.

DRUM PARTS, INC.

10311 MEECH AVE. • CLEVELAND 5, OHIO

DU PONT DIPHENYLAMINE



(DPA)

DPA and its derivatives can work for you as:

• antioxidants • anthelmintics • stabilizers
• additives • intermediates

HERE'S WHERE:

• parasite control • lubricating oils • dyes
• plastics • explosives • antiknock compounds
• natural rubbers • synthetic rubbers

Available in carload quantities, high-quality DuPont DPA, the lowest-cost aromatic secondary amine, has a minimum freezing point of 52.5°C., boiling point of 302°C.

For a fact-filled booklet, contact our branch office nearest you (Boston, Chicago, Cleveland, Houston, Los Angeles, New York, and Charlotte, N.C.) or write: E. I. du Pont de Nemours & Co. (Inc.), Explosives Dept., Wilmington 98, Del.

DU PONT

Better Things for Better Living...through Chemistry

OPD REPRINTS
35¢ A COPY

Phthalic Anhydride
Maleic Anhydride
Styrene

OIL, PAINT AND DRUG REPORTER
Reprint Department
30 Church Street, New York 7, N. Y.

Data Offered

Linde Company, a division of Union Carbide Corporation, has issued a catalogue covering its "heliarc" line of **manual welding equipment.** Copies are available from the company at 30 East 42nd street, New York 17. All manual torches in the "heliarc" line are illustrated in one-half actual size. Complete ordering information is included.

General Aniline & Film Corporation's dyestuff and chemical division has an expanded and inclusive bulletin on new types of commercially available **vinylpyrrolidone/vinyl acetate copolymers,** available from its sales division, Antara Chemicals, at 435 Hudson st., New York 14. The two-color, twenty-page publication outlines recently-developed uses of the chemicals. Technical data are presented in charts, and practical formulations are given for use in adhesives, hair-grooming agents, protective films, shoe polish and other applications.

Reilly Tar & Chemical Corporation has published the fifth edition of "Reilly Chemical Index," available from the company at Merchants Bank Building, Indianapolis 4, Ind. The brochure contains a comprehensive, though not complete, listing of **chemicals produced by Reilly,** listed alphabetically and according to classes. Next to each chemical appears a black inset drawing of the appropriate molecular structure.

U. S. Industrial Chemicals Company, a division of National Distillers & Chemical Corporation, New York, has expanded its booklet dealing with heat-sealing polyethylene **films** and **polyethylene-coated substrates.** Copies are available from the company at 99 Park avenue, New York. Included is a series of charts detailing the results of testing done by the company's polymer service laboratories at Tuscola, Ill. Influences on resin density, melt index and slip are defined. Such factors as gauge, bag style, treatment for printing and sealing direction are described.

Koppers Company has a new technical information bulletin titled "Kopoxite 159 **Resorcinol Diglycidyl Ether** (RDGE)," available from its research department. Copies may be obtained by writing to the dyestuffs division, development department, K-2967, Koppers Company, Pittsburgh 19, Pa. Purpose of the new literature, Koppers says, is to introduce the new resorcinol-based resin, which is being made available in development quantities for customer evaluation by the company's chemicals and dyestuffs division.

Union Carbide Chemicals Company, a division of Union Carbide Corporation, has brought its physical properties booklet up to date. The 1960 edition of the booklet, running 28 pages, describes more than 400 **synthetic organic chemicals.** For information on availability of copies, inquiries should be addressed to the company at its headquarters, 30 East 42nd street, New York 17, N. Y. The booklet contains information on applications and physical properties, and includes shipping data.

Pennsalt Chemicals Corporation has a new bulletin describing the **blowing of urethane foams with fluorinated hydrocarbons,** a method which is said to be growing in popularity because of the economy and uniformity of the product achieved. "Blowing Foams with 'Isotron'" is available from the company at 3 Penn Center, Philadelphia 2, Pa.

Want assured purity?

Benzene • Toluene • Xylene • Phenol • Cresol • Cresylic Acid • Naphthalene • Creosote • Picoline
Pyridine • Ammonium Sulfate • Ammonium Nitrate • Anhydrous Ammonia • Nitric Acid • Pitch

Sales Offices in Pittsburgh, New York, Chicago, Salt Lake City and Fairfield, Alabama

USS Chemicals

USS is a registered trademark

Stull and Wilson to Retire From Hercules Powder Co.

Philip B. Stull is retiring from Hercules Powder Company, Wilmington, Del., upon completion this month of thirty-three years with the company, including twenty-seven years on the board of directors.

Also retiring is Ernest S. Wilson, director of engineering, who will have completed thirty-six years with Hercules on Dec. 31.

Mr. Stull resigned at the end of last year as vice-president, board member and member of the company's executive committee. He has since been on special assignment.

The engineering department has been under Mr. Wilson's direction for twelve years, including the time of the company's greatest expansion—immediately after World War II.

Aluminum Chemicals

—*Continued from page 4*

higher prices are imminent, due to reports that the aluminum industry and United Steelworkers Union are near a new contract that would raise labor costs.

Restoration of the early 1958 price level has industry officials beaming. John H. Crey, vice-president of Reynolds, noted that price increases will "certainly lead" to higher profit margins next year.

Earlier, Frank L. McGee, Alcoa's president, mentioned advance in a year-end report. Other highlights of Alcoa's year-end statement:

• The company, undeterred by talk of idle capacity, will complete its die-casting plant in Edison Township, N. J.

• Alcoa's Warwick, Ind., plant is at the point where it can be operated on short notice. Capacity: 150,000 tons per year.

• Overall alumin consumption will rise 10 to 15 percent above an estimated 4.8 billion pounds in 1959 during the next year. The 1959 figure represents a whopping 35 percent rise over 1958 levels.

• Alcoa—and the industry—is spending a record amount on research. After having spent $18 million this year, the company will earmark $30 million for a research and development in Merwin, Pa.

• Last Thursday, Mr. Crey of Reynolds Metals, told the New York Society of Security Analysts, the following about his company:

• Reynolds' total aluminum shipments in 1959 will reach 530,000 tons—up 6 percent from 1958. Commercial shipments, excluding those for federal stockpiles, will be up 35 percent over like shipments last year.

• Facilities are operating at 80 percent of Reynolds' capacity of 634,000 tons per month. An additional 67,000 tons of capacity will soon be available.

• No new facilities are scheduled for next year, but $30 to $40 million will be spent on replacements and improvements. Further expansion will probably be slated in 1960.

Chemical Dividends Rise To $31.1 Million in Nov.

Cash dividends paid by the chemical industry totaled $31.1 million in November, an increase of $6.1 million over the same month in 1958, according to reports compiled by the Office of Business Economics of the Department of Commerce last week.

For the eleven months of the year, cash dividend payments have totaled $749.9 million as compared with $713.5 million for the same period last year.

November cash dividends for the oil refining industry totaled $29.2 million as compared with only $3.9 million during November, 1958. OBE said that this was due in large measure to a shift by the industry in the timing of its disbursements.

TAPPI Moves Headquarters

The Technical Association of the Pulp and Paper Industry (TAPPI), has moved to new and expanded quarters at 360 Lexington avenue, New York. The association had been located previously at 155 East 44th street.

Heyden Firms Up Plans

—*Continued from page 3*

plan (OPD 7/20/59), last July, a long silence, combined with the spate of expansion and plant announcements, caused many observers to believe that the company was postponing—or perhaps abandoning—its plan for the installation.

But industry doubts were allayed last week as Heyden firmed up plans for its first venture into maleic anhydride. Scheduled on-stream date for the unit is the fourth quarter of 1960.

Agricultural Chemicals

Benzene haxachloride, which has been sold to formulators on a consignment or "pay-as-they-use" basis traditionally, is now available at very attractive prices on a direct sales basis, as well. A leading producer of the chemical introduced such a schedule last week, establishing direct sales prices for low gamma BHC at .056 cents per gamma unit in bags and at .050 cents in bulk for carload or truckload quantities, f.o.b. works. On a consignment basis, corresponding prices are .075 cents and .072 cents, respectively, delivered.

High gamma BHC, not available in bulk, is now priced at .065 cents per gamma unit, direct sale, and at .075 cents, consignment, in bags, carload or truckload quantities.

Aldrin, chlordane, DDT, and heptachlor are also sold primarily on a consignment or delayed payment basis. But possibly, producers of these chemicals will institute direct sales schedules now that the initial move has been made.

Prices for fishmeal and fishscrap were advanced $3 per ton last week, to $115 and $112 per ton, respectively. The increase, however, did not represent any striking change in the supply demand balance which has been quite top-heavy of late. Rather, a trade source here pointed out, it is merely a reflection of dealers' desires to get a better price. And this seems likely now since all Menhaden plants on the Atlantic coast are shuttered and will remain so for the next five months. Normally, the end of the season sees the market strengthening and this is expected to happen once again. Only thing that could disturb the pattern this year, it's said, would be imports. Peru, according to Census bureau figures, has been a frequent exporter of meal to the US.

Other changes in the animal proteins segment of the market last week included a 25 cents reduction in dried blood at both New York and Chicago, and a 25 cents per unit-ton reduction for tankage at New York. The latter material was dropped a similar amount at Chicago marts a fortnight ago.

January 1 Price Advances

Ammonium nitrate, $1 per ton.
Ammonia, anhydrous, $2 per ton.
Nitrogen solutions, 4c. per unit-ton.
Potassium muriate, 2½c. per unit-ton.
Potassium sulfate, 3½c. per unit-ton.

Price Trends

Advanced

Fishmeal, Atlantic coast, $3 per ton
Fishscrap, Atlantic coast, $3 per ton

Reduced

Dried blood, N. Y., Chicago, 25c. per unit-ton
Tankage, N. Y., 25c. per unit-ton

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
110.74	110.56	110.95	111.08

For Current Prices see Page 9

Animal and Plant Foods

Ammonium Nitrate—Demand is reported seasonally slow. It's expected, however, that the upcoming price advance $1 per ton effective January 1) will stimulate buying interest toward the end of the month.

Total production of ammonium nitrate in September was 245,478 short tons. This represented a considerable gain over output in August (230,166 tons), and September, 1958 (217,017). Stocks at the end of the period were up correspondingly, to 105.018 tons from 94.047 on August 30.

Production of fertilizer grade ammonium nitrate in September, according to the Census Bureau, amounted to 221,103 short tons, up from 210.840 in August and 94.262 in the same month in 1958.

Reflecting this rise in output, stocks were 98.839 tons on September 30, compared with 86,968 tons a month earlier.

Ammonium Sulfate—Although the steel strike encouraged many volume buyers of ammonium sulfate to contract for next season's requirements earlier than normal, there is still considerable inventory remaining to be sold, reportedly. Thus, any overwhelming shortage such as was threatened, is quite unlikely and domestic buyers should be able to get requisite amounts of the material when needed. Foreign purchasers, however, may find it a bit difficult to get desired quantities, especially when the use-season opens up here.

The Census bureau reports that September production of synthetic ammonium sulfate was 96,087 tons, compared with 2,162 in August, and 92,743 in September, 1958. Reflecting this increased output as well as the decline in demand, stocks at September's end were up to 74,406 tons from the 49,132 tons on hand a month earlier.

Animal Proteins—Prices for fishmeal and fishscrap were advanced last week, to $115 and $111 per ton, respectively. The increases, amounting to $3 per ton, coincided with the shutdown of the few Menhaden plants that were still opened on the Atlantic coast.

The higher schedules are said to be a bit arbitrary, however, because demand is still slow, supplies still heavy. Nonetheless, with no production for the next five months, the market is expected to strengthen. Imports, of course, could change the picture; Peru from time to time ships considerable quantities of meal here.

Also last week, price changes were recorded for dried blood and tankage. The former dropped 25 cents per unit-ton at both New York and Chicago markets, making the listings at both places $4.75, while the latter dropped 25c., to $4.75 per unit ton, New York. At Chicago, tankage remained at $5 per unit-ton, the price established a fortnight ago by a 25 cent reduction. Poor demand explained the declines, a dealer here said.

Nitrogen Solutions—Deliveries of nitrogen solutions are said to be in good volume, in contrast with shipments of most other agricultural chemicals which are seasonally slow. Pricing may have something to do with this. Now quoted at $1.24 per unit of nitrogen, solutions will be based at $1.28 per unit starting January 1.

Output of nitrogen solutions in September was 68,248 short tons, up from 52,215 (revised figure) of the preceding month. Statistics from the Census bureau also show that inventories held at producing plants at September's end amounted to 20,670 tons, compared with the 27,854 tons (revised) held thirty days earlier.

Pesticides

Weeds, while worthless, are expensive. Back in 1952, the Agriculture department estimated that weed damage costs farmers $4 billion annually. This averages out to about $1,000 per year per farm family.

The 1959 bill, though it may never be tallied, should be appreciably less than the '52 figure. Wider use of chemical weed-killers is the reason-why.

In stating the case for weed killers, the National Agricultural Chemicals Association stresses this fact of terrific cost of weed damage. But it also points out several other reasons why usage of these chemicals is highly desirable, if not absolutely necessary.

Prior to 1944, NACA says, the usual methods for controlling weeds were machine cultivation and hand hoeing. And while a few chemicals were available to control weeds in a few crops, hand weeding was the norm. Thus, the "man with the hoe" was a fair description of the typical farmer, representing, as it were, the long hours of back-breaking toil he put into the use of this elemental farm tool.

Then in 1947, selective type weed killers were introduced to agriculture. In development for three years, these chemicals enabled farmers to kill either broad-leaved weeds or grasses, but not both at the same time—thus greatly simplifying what a few years before had been a long, continual job.

In addition to easing the farmer's weeding problems and saving him money and time, usage of selective and non-selective type weed killers have made it possible to reclaim land for pasture or farming. They have also cleaned up canals and ponds and reclaimed recreation areas formerly choked with poisonous plants.

POTASSIUM CHLORIDE
for the Chemical and Fertilizer Industries
TECHNICAL GRADE POTASSIUM CHLORIDE
99.7% K Cl Minimum
HIGRADE GRANULAR MURIATE OF POTASH
HIGRADE MURIATE OF POTASH
GRANULAR MURIATE OF POTASH
UNITED STATES POTASH COMPANY
DIVISION OF UNITED STATES BORAX & CHEMICAL CORP.
50 ROCKEFELLER PLAZA, NEW YORK 20, N.Y.
UNITED STATES POTASH — A PRODUCT OF NEW MEXICO U.S.A.
Reg. U.S. Pat. Off.

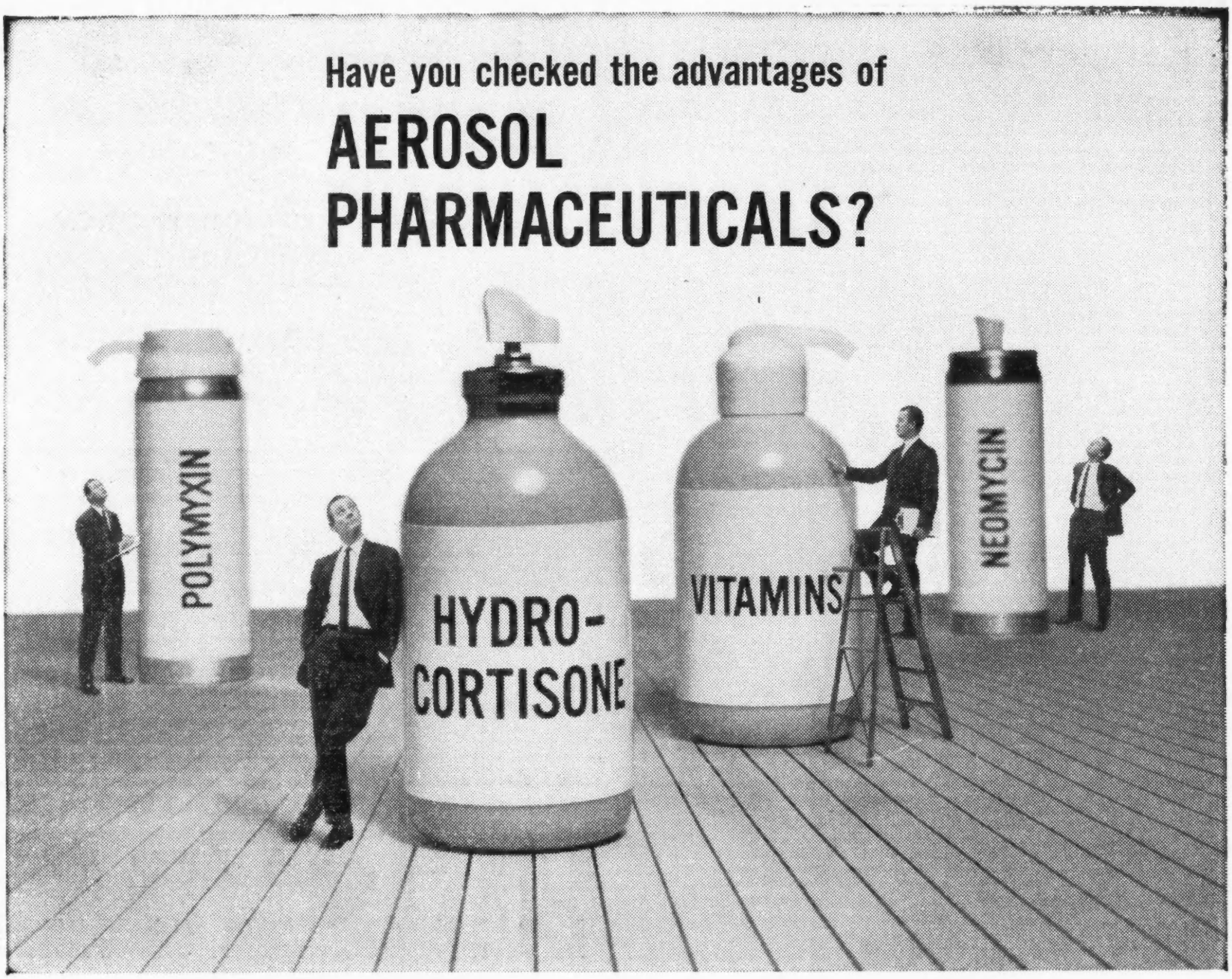
DUVAL
MURIATE OF POTASH
SULPHUR
DUVAL SULPHUR and POTASH CO.
Exclusive Distributors
ASHCRAFT-WILKINSON CO.
ATLANTA, GEORGIA
Cable Address: Ashcraft
District Offices
Norfolk, Va. • Charleston, S.C. • Tampa, Fla.
Jackson, Miss. • Columbus, Ohio • Montgomery, Ala.
Des Moines, Ia.

DDT
LEBANON CHEMICAL COMPANY
P. O. Box 532, Lebanon, Pennsylvania

CRUDE SULPHUR
SOLID OR LIQUID
IN ANY AMOUNT—QUICKLY
by
VESSEL
BARGE
RAILROAD
TRUCK
FREEPORT SULPHUR COMPANY
161 EAST 42nd STREET • NEW YORK 17, N. Y.

Have you checked the advantages of

AEROSOL PHARMACEUTICALS?



• The unique advantages of pressure packaging lend themselves to a number of pharmaceutical products and applications. For some time now Pfizer has been working in close cooperation with the pressure packaging industry to develop formulations where these advantages will be most profitable for pharmaceutical manufacturers.

For example, the stability of liquid multivitamins is greatly extended by pressure packaging because the preparations are overlayed by an inert gas, such as nitrogen, for the life of the container. Also, they are protected from the deleterious effects of light.

Another inherent advantage of pressure packaging is the complete freedom from atmospheric contamination afforded the contents of the package. Topical preparations utilizing Pfizer Hydrocortisone and the antibiotics—neomycin and polymyxin—as well as multivitamin preparations are particularly enhanced by this no-contamination feature.

The Pfizer non-toxic plasticizers—Citroflex® A-2 and A-4 have proven highly effective for polyvinyl compounds used in pressure packed hair sprays and spray bandages.

Because of the firm conviction that pressure packaging will play an important role in the pharmaceutical industry, Pfizer is continuing to direct considerable effort towards the development of antibiotic, steroid and vitamin aerosol formulations. For an interesting report concerning the role pressure packaging is playing, and will play, in the pharmaceutical industry write to Pfizer requesting reprints of the article, "Pressure-Packed Pharmaceuticals."

Among the many other advantages of pressure packed pharmaceuticals are:

- **Application is fast, convenient, uniform.**
- **A high concentration of a drug over a limited area may be obtained.**
- **Direct contact with the injured area is eliminated, often reducing pain.**
- **No waste through intermediate applicator.**
- **Dosage may be controlled accurately with metered valves.**

Science for the World's Well-Being **Pfizer** *Manufacturing Chemists for Over a Century*

CHAS. PFIZER & CO., INC.
Chemical Sales Division
630 Flushing Ave., Brooklyn 6, N. Y.
Branch Offices: Clifton, N. J.; Chicago, Ill.; San Francisco, Calif.; Vernon, Calif.; Atlanta, Ga.; Dallas, Tex.

Drugs, Fine Chemicals

Last week for the first time in several months, the drug industry was on no griddles no where. Senator Estes Kefauver had turned off the hot lights—that had bothered some witnesses—in the anti-monopoly subcommittee hearing room, and the chicken-stilbestrol scare was at least temporarily forgotten, if not over. Behind the industry was a resounding victory in the government's suit charging five prominent drug firms with fixing Salk vaccine prices from 1955 to 1957, and a rather successful week before Kefauver's probers. Ahead, more of the same in Washington.

On the market scene . . . As demand picked up this fall, prices for several weak items strengthened. Penicillin, while at lowest-ever levels, $21 to $25 per kilo, is nonetheless a firmer market and the threat of still lower prices on routine trading is not nearly as serious as formerly. Markets for streptomycin and DHS have also stabilized and it looks like the $40 to $41 schedule will stick indefinitely—or, at least, until domestic and foreign requirements, currently large, taper off.

For vitamins, two price reductions have been announced within the past month. The substantial reduction in folic acid (9 to 19 cents per gram) has not gone industry-wide but some firms operating under the older, higher schedules have admitted to meeting competition when big business is at stake. Consequently, that situation remains clouded. The reduction in vitamin A, amounting to ½ cent per billion units on both liquid and dry forms, was adopted uniformly througnout the trade, however.

Help is on the way to dental patients —and dentists as well—in the form of a tranquilizing and antisecretory drug. Known as Atarax (hydroxyzine hydrochloride), the drug has been found particularly effective in relieving the emotional stress that engulfs many people when nearing the dentist's chair.

As reported in the New York State Dental Journal, Atarax's ataractic (relaxing) effect was rated satisfactory or fair in 86 percent of some 200 patients studied. Side effects from use of the drug, such as dizziness, nausea and itching, were found to be infrequent and mild. Noted also: less gagging among patients during impression taking, less pain experienced on penetration of the hypodermic needle. Concluded: Atarax is a "most valuable complementary therapy for the emotionally tense person."

Antibiotics—Compared with the situation a few months back, things in the antibiotics market are considerably improved. Though lower, prices for penicillin are firmer at $21 to $25 per billion units and demand, as is usual this time of year, has picked up both here and abroad.

Streptomycin and dihydrostreptomycin prices are also considerably stronger at $40 to $41 per kilo than at the beginning of the fourth quarter when several declines were noted. Several strength-giving factors may be involved. One of these, and perhaps the most important, is that a major producer has halted production. Called a temporary move by the firm, it is thought by others to be more or less permanent.

Demands here and in Europe are also said to be up, and with less material being offered, this has also had a salutary effect on the market.

Gelatin—Total production of gelatin in October was 4,893,000 pounds, up from 4,631,000 pounds in September. Output in October 1958, however, was slightly higher at 5,074,000, Census bureau figures show.

Shipments of gelatin in October totaled 4,846,000 pounds, compared with 4,855,000 in September, and 4,952,000 in the same month in 1958.

Stocks at the end of the period measured 11,474,000 pounds, up from 11,427,000 the preceding month, but considerably lower than those held at the end of October, 1958—12,276,000 pounds.

The statistical position for pharmaceutical grade gelatin in October paralleled the overall trend—production up, shipments down, stocks on the rise.

Output was 386,000 pounds, up from both September (338,000) and October, 1958 (270,000 pounds).

Shipments totaled 301,000 pounds, down from 337,000 the preceding month, but way above the 190,000 pounds shipped in the same month the year before.

Stocks of pharmaceutical gelatin rose to 959,000 pounds by October's end, from the 874,000 pound inventory thirty days earlier. The same date in 1958, stocks were 844,000 pounds.

Germicides—Germicides, or germ-killing agents, are a group of chemical products that are rapidly catching on. To combat the dreaded staphylococcus germ, they are being added to ordinary floor cleaning agents designed for use in public places such as stores and hospitals, where proper sanitation is essential. This and similar applications are reportedly taking increasing quantities of such trade-name items as "Santophen I."

Iodine—October imports totaled 211,473 pounds. Of this amount, Chile, the traditional supplier of US iodine needs, shipped 194,668 pounds, Japan the remainder (16,805).

It is apparent from these Custom bureau figures that Japan is not nearly the competitor for US iodine markets as some reports would lead one to suspect.

In an article appearing in the American Journal of Public Health, iodine was reported to be more effective than chlorine when used as a disinfectant for swimming pool water. Basis for this: A study conducted by scientists associated with the University of Florida.

Eight pools varying in size from Olympic-type to small home-type were used in the six-month study. Bacteriological tests and chemical tests to determine residual chlorine and residual iodine confirmed iodine's superiority, reportedly.

During the period when chlorine was being added, the water of all pools exhibited the familiar odor and taste associated with that element. In the iodine-treated pools, however, "no perceptible odor or taste was present in the water of

Price Trends

Advanced
None

Reduced
None

Comparative Price Indexes
(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
60.23	60.23	60.23	62.17

For Current Prices See Page 9

Drug and Fine Chemical Exports: October

Exports of selected drugs and fine chemicals for the months of September and October, 1959, as reported by the Bureau of Census, were as follows:

		October	September
Analgesics and antipyretics	lbs.	57,730	15,980
Antibiotics, n.e.c.*	grs.	12,313,625	10,194,171
Ascorbic Acid	lbs.	32,244	43,334
Aspirin	lbs.	116,755	.....
B-complex (excluding B_1 and B_2)	lbs.	53,112	38,592
Bacitracin	100-million units	23,155	3,346
Dihydrostreptomycin	gms.	878,160	5,733,850
Pectin and preparations	lbs.	65,645	39,895
Penicillin, bulk	million units	4,912,369	3,397,519
Streptomycin	gms.	3,241,000	3,187,250
Sulfa Drugs	lbs.	50,629	68,566
Thiamin	lbs.	3,792	4,300
Vitamin A, bulk and medicinal	lbs.	10,943	14,097
Vitamins, n.e.c.*	lbs.	84,900	69,632

* Not elsewhere classified by the Census bureau.

For Vitamins

send your inquiries to

ROCHE ROUND the WORLD

THE ROCHE COMPANIES:

ARGENTINA:	Productos Roche S.A., Buenos Aires
AUSTRALIA:	Roche Products Pty. Ltd., Sydney
AUSTRIA:	Hoffmann-La Roche Wien GmbH., Wien V/55
BELGIUM:	Produits Roche S.A. Belge, Bruxelles-Midi
BRAZIL:	Produtos Roche S.A., Rio de Janeiro
CANADA:	Hoffmann-La Roche Ltd., St. Laurent, Montreal 9, P. Q.
COLOMBIA:	Productos Roche S.A., Bogotá
CUBA:	Productos Roche S.A., La Habana
ENGLAND:	Roche Products Ltd., London, W.1.
FRANCE:	F. Hoffmann-La Roche & Cie., Paris IVe
GERMANY:	Deutsche Hoffmann-La Roche A.G., Grenzach (Baden)
INDIA:	Roche Products Private Ltd., Bombay 1
ITALY:	Prodotti Roche S.p.A., Milano
JAPAN:	Nippon Roche K.K., Tokyo
MEXICO:	Productos Roche S.A., Mexico 12, D.F.
SOUTH AFRICA:	Roche Products (Pty) Ltd., Johannesburg
SPAIN:	Productos Roche S.A., Madrid
SWEDEN:	Roche-Produkter Aktiebolag, Stockholm
SWITZERLAND:	F. Hoffmann-La Roche & Co. A.G., Basel
TURKEY:	Roche Müstahzarlari Sanayi Ltd., Şirketi, Istanbul
URUGUAY:	Roche International Inc., Montevideo

Roche agencies in other countries

Vitamin Division, **Hoffmann-La Roche Inc.**, Nutley 10, N. J.

HUISKING

Camphor U.S.P. Powder
Camphor U.S.P. Tablets
Tower Brand
Chlorophyll Allen's
Cocoa Butter
Copper Sulfate
Ichthammol
Magnesium Carbonate Blocks
Menthol
Naphthalene Refined
Rosin Powder
Santonin
Sugar of Milk
Sulfur Precip. U.S.P.
Theobromine Alkaloid

Cinchonidine
Cinchonine
Quinidine
Quinine
and their Salts

Produced by Buchler & Company

CHAS. L. HUISKING & CO., INC.

417 Fifth Ave., New York 16, N. Y., Phone: ORegon 9-8400. Cables: Huisking, N. Y.

MANUFACTURING DIVISIONS:

Since 1910
Plants and Warehouses at Lyndhurst, N. J. and Williamsport, Pa.

GLYCO CHEMICALS

PEDER DEVOLD OIL CO.

CLINTBROOK CHEMICALS — CLINTBROOK CHEMICAL CO.

METOL

Monomethylparaminophenol Sulfate
Registered Trade Mark

TANNIC ACID GALLIC ACID
(U.S.P. and Technical Grades)

PYROGALLIC ACID
(U.S.P. and Technical Grades)

THE HARSHAW CHEMICAL CO.
CLEVELAND 6, OHIO

Cleveland • Chicago • Cincinnati • Detroit • Hastings-on Hudson, N. Y.
Houston • Los Angeles • Philadelphia • Pittsburgh

new! exclusive!

Available for the first time in commercial quantities

Chemically Pure

HYDROBROMIC ACID 48%

MEETS ACS SPECIFICATIONS
Low in chlorides, sulfates and sulfites.

FOR SPECIFICATIONS AND QUOTATION
Contact the nearest Westvaco Office:

CHARLOTTE, N.C.—Liberty Life Bldg., FRanklin 7-1521
CHICAGO—6 North Michigan Ave., FInancial 6-2618
DENVER—Farmers Union Bldg., AComa 2-7858
LOS ANGELES—2121 Yates Ave., RAymond 3-7870
PHILADELPHIA—Beury Bldg., BAldwin 3-0183
ST. LOUIS—211 North Florissant Rd., JAckson 1-1153
SO. CHARLESTON, W. VA.—Research Bldg., RIverside 4-9431
VANCOUVER, B.C.—P.O. Box 154, OXford 3-3685

Putting Ideas to Work

FOOD MACHINERY AND CHEMICAL CORPORATION
Westvaco Chlor-Alkali Division
General Sales Offices:
161 E. 42nd STREET, NEW YORK 17

Drugs, Fine Chemicals

the pool," the investigators said. Also, no complaints of eye irritation were received from bathers.

Another advantage of iodine over chlorine is that it is easier to approximate the average iodine demand of swimming pools since it is much less dependent on bathing load, the most important single factor in disinfecting pools with chlorine.

The study concluded that "a daily dosage of one part per million of iodine (potassium iodide) would be sufficient under most conditions for use in home pools and perhaps double that figure for more heavily used pools."

More information about this can be obtained from the Iodine Information Bureau.

Saccharin—Substantial price reductions in the latter part of October appear to have had a slight firming influence on the domestic market, occasioning some new inquiries and spurring resellers to reorder. Prices on imported material are still competitive, however, sources advise.

Imports in October dropped to 15,817 pounds from 38,408 in September. Both months, Japan was the sole source of supply.

Actual effects of the price reduction on sales of domestic versus Japanese saccharin will become clearer when import figures for the current month are available.

Sodium Alginate—October imports of sodium alginate were 36,500 pounds, up from 26,020 pounds in September. The United Kingdom was the sole supplier.

Price on domestic white powder is $1.02 per pound for 300 pounds or more. No changes are expected immediately.

Tartaric Acid—Imports of tartaric acid in October were 47,950 pounds, way below September's total of 210,182 pounds. Drop-off apparently reflected the considerable inventories held by consumers of the acid here. These had been built up in August and September in anticipation of a prolonged dock strike. Dealers reported in early October that buying had been on the grand scale for several weeks.

Spain, which has become the largest supplier of tartaric acid to this country, shipped no material here in October. Italy, however, shipped 43,761 pounds and France 4,189 pounds.

Domestic requirements have been increasing of late as consumers' inventories neared depletion.

Vitamins—Imports of vitamins of other than animal origin dropped to 55,555 pounds in October, from 70,246 pounds the preceding month. This decline may represent increased usage of vitamins in producing countries abroad, a trend that is noted by several people in the trade. It could also reflect the shutdown of an ascorbic acid plant in Italy, following an on-site explosion. Ascorbic is frequently mentioned as one of the biggest import items so it's likely the vitamin represents a considerable percentage of total imports in any given month.

In October, Japan, as usual, was the major source of material, supplying all of the vitamins of animal origin, 331 pounds, and 17,790 pounds of those otherwise derived.

Denmark, source of 15,185 pounds, was in second place. Relatively small quantities, in contrast, came from Italy (10,040 pounds); The Netherlands (4,470); France (2,205); West Germany (1,455); Canada (1,390); Switzerland (1,050); Panama (1,102); and The United Kingdom (868 pounds).

Latest price revision in this segment of the market was the reduction in vitamin A prices, December 1, which set base prices at 9½c. per million units for all

—*Continued on page 67*

NOW OVER 5100 BIOS CHEMICALS

- POTASSIUM IODOPLATINATE
- POTASSIUM PLATINOCYANIDE
- POTASSIUM SELENOCYANATE
- PRASEODYMIUM METAL
- PRASEODYMIUM OXIDE
- PREGNANDIOL GLUCURONIDE
- PROPAMIDINE
- PROPARGYL ALCOHOL
- PROPIOLIC ACID
- n-PROPYLGLYCINE
- PROPYL NITRATE
- PROTHROMBIN
- PROTOPORPHYRIN
- PTYALIN
- PYOCYANIN DIHYDROCHLORIDE
- PYRAZINE
- PYRIDINE-2-ALDEHYDE
- PYRIDINE-4-ALDEHYDE
- PYROGALLOL-4-CARBOXYLIC ACID
- PYRROCOLINE

Ask for our new complete catalogue.

BIOS *Laboratories, Inc.*
17 West 60th St. New York 23, N.Y.
PLaza 7-8171

P&B

BERYLLIUM • LANTHANUM • CERIUM
THORIUM and ZIRCONIUM SALTS • AMMONIUM BIFLUORIDE
TITANIUM POTASSIUM OXALATE
ABSORPTION BASE • CHLOROPHYLL • LANOLINE, U.S.P. • SAPONINE
BIOLOGICAL STAINS • ph BUFFER SOLUTIONS
"FIXANAL" CONCENTRATED PREPARATIONS FOR NORMAL SOLUTIONS
MOLDOL (Preservative)

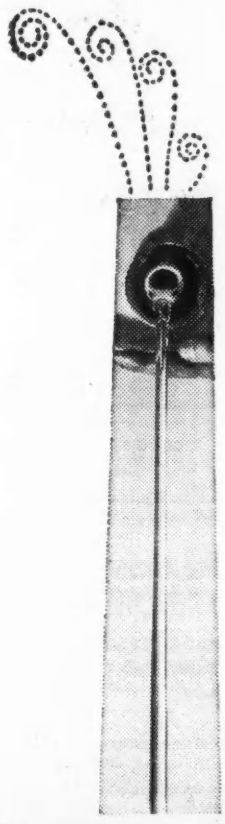
SINCE 1900 **Pfaltz & Bauer, Inc.**
EMPIRE STATE BUILDING, NEW YORK

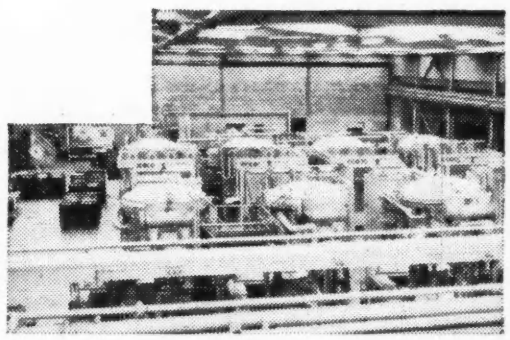
ITALIAN

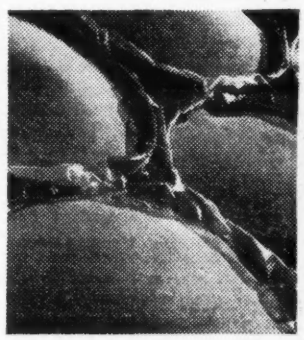
TARTARIC ACID
CREAM OF TARTAR
ROCHELLE SALTS

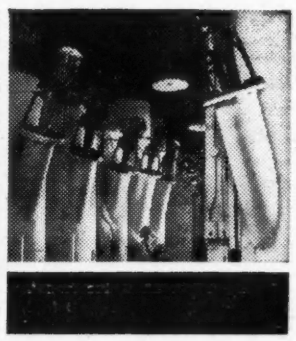
N. F.

Distributed by
NYLOS TRADING CO., INC.
21 West Street, New York 6, N. Y.
Telephone: Digby 4-1920 • Cable: NYLOSTRA, New York









Vitamin A under one "roof"

Why buy vitamin A from a primary producer like DPi?

Partly because the chain of supply is shorter, hence simpler. Delivery doesn't depend on when we can get the vitamin from someone else. We make it from the ground up, out of raw materials in plentiful supply.

It's a safe operation, too. You're in careful hands all the way. Synthetic vitamin A is the specialty of the house. It has been ever since we started the business in this country.

And it's fast. We operate in a plurality of buildings, but in effect everything is under one roof. You phone us an order for *Myvax® Vitamin A Acetate* or *Palmitate*. We custom-blend it in any potency up to 1 million USP units per gram, and head it your way. You need *Myvax Dry Vitamin A Palmitate;* we put it up swiftly, 500,000 units to the gram—with vitamin D, if you wish, at several potencies.

We cooperate with you on stability tests; run vitamin A assays on your formulations. For facts or a quotation on *Myvax Vitamin A*—oil form or dry—write ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • W. M. Giilies, Inc., West Coast • Charles Albert Smith Limited, Montreal and Toronto.

leaders in research and production of vitamin A

DPi

Also . . . vitamin E . . .
distilled monoglycerides . . .
some 3700 Eastman Organic Chemicals
for science and industry

Distillation Products Industries *is a division of* **Eastman Kodak Company**

IMPORTS at United States Ports

New York

ACONITE—12 bls, S B Penick & Co, Rijeka
ALGINATE—10 dms, T M Duche & Sons, Bremen
ALUMINUM SULFATE—299 bgs, C M C Chemicals Inc, Liverpool
450 bgs, Industrial Chemical & Dye Co, Liverpool
AMMONIUM CARBONATE—30 dms, American Agricultural Chemical Co, Glasgow
AMYLOPECTIN-G—800 bgs, Stein Hall & Co, Rotterdam
ANILINE DYES—5 dms, Sandoz Inc, Havre
72 dms, Putnam Chemical Corp, Hamburg
47 dms, H Bruckmann & Lorbacher, Bremen
73 dms, Geigy Chemical Corp, Bremerhaven
41 dms, Geigy Chemical Corp, Havre
16 dms, Rotterdam
ANNATO SEED—376 bgs, Foreign Domestic Distributors, Callao
126 bgs, Callao
ANTIMONY—40 cks, Watson Geach, Liverpool
ANTIMONY OXIDE—649 bgs, Liverpool
313 bgs, Antwerp
ANTIMONY PENTOXIDE—2 dms, Chemimpex, Hamburg
ANTIMONY REGULUS—14 tons, C Gitlan, Antwerp
810 cs, Rijeka
ARABIC GUM—300 bgs, National City Bank, Port Sudan
150 bgs, Bank of N Y, Port Sudan
300 bgs, Bankers Trust Co, Port Sudan
75 bls, Max Van Pels, Rotterdam
ARSENIC, METALLIC—60 dms, C Tennant Sons & Co, Avonmouth
BEESWAX—27 bgs, Biddle Sawyer Corp, Tampico
91 bgs, Manufacturers Trust Co, Lisbon
85 bgs, Chase Manhattan Bank, Lisbon
25 bgs, Machado & Co, Ciudad Trujillo
300 bowls, Launda
101 blks, Lobito
90 bgs, Tampico
BERGAMOT OIL—25 qu cs, Magnus Mabee & Reynard, Messina
10 hf cs, Ungerer & Co, Messina
25 cs, Messina
BENZOSULFIMIDE—3 dms, Kanematsu N Y Inc, Kobe
BOIS DE ROSE OIL—10 dms, Centflor Manufacturing Co, Iquitos
6 dms, Kline & Co, Iquitos
30 dms, Lo Curto & Funk, Manaus
4 dms, Northam Trading Co, Callao
4 dms, Hollander Trading Corp, Callao
20 dms, Iquitos
BRONZE POWDER—20 dms, Acme Bronze Powder Co, Bremen
BRUCINE SULFATE—15 cs, Esso Standard Oil Co, London
CALCIUM CARBONATE—600 bgs, Pluess Staufer, Antwerp
1,200 bgs, N H Weitzner, Antwerp
CALCIUM CARBONATE, PRECIPITATED — 500 bgs, H J Baker & Bro, Avonmouth
320 bgs, H J Baker & Bro, London
CAMPHOR SYNTHETIC—224 cs, P H Petry, London
CAMPHOR OIL—35 dms, Keelung
CANDELILLA WAX—138 bgs, Cornelius Wax Refining Corp, Tampico
626 bgs, Tampico
CARAWAY SEED—100 bgs, Frank Tea & Spice Co, Rotterdam
100 bls, Levy & Levis Co, Rotterdam
300 bgs, Rotterdam
CASEIN—1,000 bgs, Tupman Thurlow, Buenos Aires
100 bgs, F H Paul & Stein Bros, Rotterdam
1,200 bgs, Pacific National Bank, Melbourne
200 bgs, Manufacturers Trust Co, Buenos Aires
800 bgs, Hamburg
CASSIA—4,165 bls, Rotterdam
CASTOR BEANS—107 bgs, Gonalves
2,486 bgs, Port Au Prince
CASTOR OIL—370 tons, Wallace & Tiernan, Lobito
500 tons, Baker Castor Oil Co, Santos
202 tons, Rotterdam
CETYL STEARYL ALCOHOL—200 bgs, A & S Corp, Yokohama
CHARCOAL, ANIMAL—1,000 bgs, American Sugar Refining Co, Glasgow
1,000 bgs, National Sugar Refining Co, Glasgow
CHARCOAL, BONE—505 bgs, Lisbon
CHLORAL HYDRATE—11 cms, Hamburg
CHOLESTEROL—200 cs, Arista Oil Products Co, Yokohama
CITRONELLA OIL—275 dms, George Uhe Co, Keelung
125 dms, L A Champon & Co, Keelung
CLAY—929 bgs, Cement Import Corp, Bremen
CLAY, BALL—2,559 bgs, United Claymines Corp, Avonmouth
CLAY, CHINA—2,538 bgs, J W Higman Co, Avonmouth
836 bgs, Anglo American Clays Corp, Avonmouth
COBALT OXIDE—204 cks, Antwerp
COBALT POWDER—20 dms, C Hardy, Havre
COCONUT OIL—75 tons, Fallck Products Co, Hamburg
775 tons, American Trust Co, Cebu
COPAIBA BALSAM—5 dms, Ungerer & Co, Manaus
CORN STARCH—400 bgs, Manhattan Adhesives Corp, Antwerp
2,100 bgs, Antwerp
CRESYLIC ACID—60 cms, Van Oppen & Co, Avonmouth
25 tons, Van Oppen & Co, Liverpool
CUBE ROOT—1,132 bls, Rubber Corp of America, Iquitos
225 bgs, Rubber Corp of America, Iquitos
CUBE POWDER—1,280 bgs, Foreign Domestic Distributors, Callao
CUMIN SEED—500 bgs, Delano Corp of America, Khorramshahr
500 bgs, Manufacturers Trust Co, Khorramshahr
532 bgs, Khorramshahr
CUTTLEFISH BONE—100 cs, D Young, Kobe
DAMMAR GUM—77 bgs, O G Innes Corp, Singapore
DEGRAS—139 dms, Lanaetex Products, Nagoya
115 dms, Kanematsu N Y Inc, Nagoya
50 dms, Hummel Lanolin Corp, Bremen
108 dms, N I Malmstrom, Bremen
48 dms, Olympic Shipping Co, Liverpool
104 dms, Port Adelaide
DEXTRIN—2,356 bgs, Stein Hall & Co, Rotterdam
335 bgs, Rotterdam
n-n-DiBENZL ETHYLENEDIAMINE DIACETATE—5 dms, Standard International Corp, Liverpool
DILL SEED—160 bgs, V A Cordovi, Bombay
DIMETHYL SULFOXIDE—22 dms, Gothenburg
2,4-DINITROANILINE—10 dms, Rotterdam
DYES, COALTAR—18 dms, Orlex Dyes & Chemical Corp, Hamburg
5 dms, H Bruckmann & Lorbacher, Hamburg
EUCALYPTOL—16 dms, Seville
EUCALYPTUS OIL—63 dms, Seville
FISHLIVER OIL—3 dms, Arista Oil Products Co, Yokohama
6 dms, Kanematsu N Y Inc, Yokohama
5 cs, J D Smith, Yokohama
FISHMEAL—2,090 bgs, Marine & Animal By Products Corp, Iquique
FORMIC ACID—99 dms, Rotterdam
FUEL OIL—316,847 bbls, Shell Caribbean Petroleum Co, Punta Cardon
215,657 bbls, Hess Inc, Maracaibo
419,987 bbls, Hess Inc, Punta Cardon
75,257 bbls, Hess Inc, Curacao
129,491 bbls, Hess Inc, Bajo Grande
126,056 bbls, American Independent Oil Co, Mena Abulla
100,597 bbls, New England Petroleum Co, Curacao
120,931 bbls, Esso Standard Oil Co, Caripito
934,792 bbls, Esso Standard Oil Co, Las Piedras
122,000 bbls, Esso Standard Oil Co, Aruba
FULLERS EARTH—400 bgs, L A Salomon & Bro, Avonmouth
GALL—4 dms, International Packers Ltd, Melbourne
GALLIC ACID—2 dms, J E Bernard, Glasgow
GARLIC OIL—10 cs, Magnus Mabee & Reynard, Kobe
GELATIN—188 bgs, D H Burdett, Liverpool
200 bgs, T M Duche & Sons, Cardiff
99 bgs, Royal Bank of Canada, Avonmouth
409 bgs, Transatlantic Animal By Products Corp, Rotterdam
132 bgs, Onyx Oil & Chemical Co, Bremen
60 bgs, T M Duche & Sons, Hamburg
331 bgs, Transatlantic Animal By Products Corp, Antwerp
100 dms, Arles Co, Havre
120 cs, T M Duche & Sons, Copenhagen
100 dms, Franco Belgian Corp, London
300 bgs, Leghorn
100 dms, Havre
GINGER—20 bgs, Van Loan & Co, Kingston
GLUCOSAMINE HYDROCHLORIDE—10 cs, Byron Chemical Co, Yokohama
GLUE—50 dms, Corbett & Co, Marseille
GLYCERINE—83 dms, R P Casado, Havana
GRAPHITE—250 bgs, Asbury Graphite Mills, Hong Kong
1,225 bgs, Joseph Dixon Crucible Co, Bremen
GUAR GUM—1,023 bgs, J L Quesada, Valencia
GYPSUM—400 bgs, Whittaker Clark & Daniels, Liverpool
GYPSUM, CRUDE—10,003 tons, U S Gypsum Co, Hantsport
6,983 tons, Allied Chemical Corp, Halifax
IODINE, CRUDE—25 bbls, Bunge Corp, Yokohama
49 kgs, Mitsubishi International Corp, Yokohama
IPECAC ROOT—11 bgs, H Weber & Co, Cristobal
IRON POWDER—9 dms, Caldwell & Co, Rotterdam
ISO-DECANOL—1 dm, Chemical Manufacturing Co, Liverpool
ISOSAFROEUGENOL—4 cs, Export Import Services, Yokohama
KARAVA GUM—62 bgs, Colony Import & Export Corp, Bombay
124 bgs, Transcontinental Importing Corp, Bombay
KOLA NUTS—200 bgs, D Steengrafe & Co, Kingston
LACTIC ACID—16 dms, A Millner & Co, Liverpool
LACTOSE—53 cs, Chemo Puro Manufacturing Co, Rotterdam
LAUREL LEAVES—93 bls, Hismoco American Co, Izmir
LAVANDIN OIL—8 cks, Brown Bros, Cannes
10 dms, Bertrand Freres, Cannes
63 dms, Tombarel Products Corp, Cannes
13 dms, Cannes
LEMON OIL—6 dms, Canada Dry Corp, Buenos Aires
10 cs, Ungerer & Co, Messina
8 dms, Ungerer & Co, Vera Cruz
1 dm, Foreign Chemical Co, Vera Cruz
LICORICE EXTRACT—240 bgs, Wm E Martin & Sons, Izmir
LIME OIL—3 dms, Citrus & Allied Essential Oils Co, Cristobal
LITHARGE—184 dms, Eagle Picher Co, Tampico
LOCUST BEAN GUM—224 bgs, Hanover Bank, Lisbon
700 bgs, Morningstar Paisley, Inc, Piraeus
100 bgs, T M Duche & Sons, Rotterdam
LOGWOOD EXTRACT—40 dms, American Dyewood Co, Kingston
MAGNESITE—20 kgs, Lo Curto & Funk, Hamburg
10 kgs, Madison Lewis Inc, Hamburg
15 kgs, Jerdan Chemical Corp, Hamburg
MAGNESIUM HYDROXIDE—40 bgs, Reheis Co, Liverpool
MANDARIN OIL—40 qu cs, Fritzsche Bros, Messina
MARJORAM—90 bgs, Callao
MELAMINE—896 bgs, Liverpool
MERCURIC AMMONIUM CHLORIDE — 4 dms, Gallard Schlesinger, Southampton
MERCURY—700 flks, J H Schroder, Cadiz
MOLASSES—477 tons, W R Grace & Co, Salaverry
MUSTARD SEED—100 bgs, McDonnel & Co, Copenhagen
500 bgs, Berns & Koppstein, Copenhagen
NAPHTHALENE—467 bgs, Gallard Schlesinger, Hamburg
1,429 bgs, Rotterdam
756 bgs, Antwerp
NAPHTHOLS—3 dms, H Bruckmann & Lorbacher, Bremen
b-NAPHTHOL—100 bgs, Rotterdam
NUTMEG—12 bgs, Gillespie & Co, Port of Spain
125 bgs, Rotterdam
OCOTEA CYMBARUM OIL—24 dms, Lo Curto & Funk, Itajai
14 dms, E Roth & Co, Itajai
23 dms, Manton Trading Corp, Itajai
OLIVE OIL—130 dms, J Ossola Co, Seville
78 dms, National City Bank, Seville
25 dms, Chase Manhattan Bank, Seville
130 dms, Smith Weihman Co, Malaga
110 dms, B M Reeves Co, Seville
OPIUM—200 cs, Istanbul
ORANGE OIL—3 dms, Citrus & Allied Essential Oils Co, Puerto Plata
OXGALL—3 dms, Wilson & Co, Buenaventura
PALMKERNEL OIL—250 tons, E F Drew & Co, Rotterdam
340 tons, Lever Bros, Matadi
394 tons, Ango Ango
PEATMOSS—475 bls, Halfmoon Trading Co, Rotterdam
400 bls, Premier Peatmoss Corp, Copenhagen
PECTIN—215 dms, T M Duche & Sons, Copenhagen
PEPPER, BLACK—300 bgs, C M Van Sillevoldt, Belem-Para
PEPPER, RED—300 bgs, M J Golombeck, Iskenderun
100 bgs, Louis Furth, Iskenderun
200 bgs, Wm E Martin & Sons, Iskenderun
100 bgs, Delano Corp of America, Iskenderun
1,000 bgs, East India Trading Co, Iskenderun
200 bgs, C M Van Sillevoldt, Iskenderun
200 bgs, Wm M Allison & Co, Iskenderun
192 bgs, Iskenderun
200 bgs, International Expediters, Kobe
40 kgs, Star Coffee Co, Kobe
100 bgs, Wm E Martin & Sons, Kobe
100 bgs, M J Golombeck, Yokohama
273 bgs, M J Golombeck, Lagos
PEPPER, WHITE—200 bgs, East India Trading Co, Belem-Para
70 bgs, Singapore
PETROLEUM, CRUDE—194,499 bbls, Cities Service Oil Co, La Salina
132,000 bbls, Suntide Refining Co, Puerto La Cruz
118,004 bbls, Sohio Petroleum Co, Maracaibo
111,323 bbls, Metropolitan Petroleum Corp, Puerto Miranda
105,000 bbls, Socony Mobil Oil Co, Puerto La Cruz
PHTHALIC ANHYDRIDE—143 bgs, Argus Chemical Corp, Antwerp
667 bgs, M W Hardy & Co, Hamburg
1,667 bgs, Amer Ford International Corp, Hamburg
200 bgs, Industrial Chemical & Dye Co, Havre
1,000 bgs, Rotterdam
a-PICOLINE—85 dms, Van Oppen & Co, Avonmouth
46 dms, G A Abood Co, Rotterdam
PIMENTO—80 bgs, Wm E Martin & Sons, Kingston
48 bgs, C M Van Sillevoldt, Kingston
161 bgs, F D Keller & Son, Tampico
PIMENTO LEAF OIL—4 dms, George Uhe Co, Kingston
PINE OIL—1 bbl, Ufinindo International Corp, Rijeka
POLYVINYL CHLORIDE—54 cs, Robeco Chemicals, Yokohama
POLYVINYL CHLORIDE RESIN—800 bgs, H Bedos & Co, Kobe
POPPYSEED—200 bgs, M J Golombeck, Izmir
200 bgs, Manufacturers Trust Co, Izmir
300 bgs, Chemical Bank, Izmir
200 bgs, Chase Manhattan Bank, Izmir
250 bgs, Louis Furth, Rotterdam
150 bgs, Biddle Purchasing Co, Rotterdam
200 bgs, M J Golombeck, Rotterdam
63 bgs, M J Golombeck, Copenhagen
475 bgs, Beirut
100 bgs, Rotterdam
POTASSIUM BICARBONATE—45 bgs, James E. Fox, Rotterdam
POTASSIUM CYANIDE—100 dms, Ugine Industries, Havre
POTASSIUM SILICO FLUORIDE—500 bgs, London
PYRETHRUM EXTRACT—45 dms, McLaughlin Gormley King Co, Matadi
PYRETHRUM FLOWERS—110 bls, P H Petry, Puna
PYRIDINE—51 dms, Van Oppen & Co, Avonmouth
QUEBRACHO EXTRACT—4,357 bgs, First National Chicago, Buenos Aires
500 bgs, Barkey Importing Co, Buenos Aires
4,152 bgs, American Tanners Ltd, Buenos Aires
RICE STARCH—540 bgs, American Key Products, Rotterdam
ROSEMARY LEAVES—60 bls, Levy & Levis Co, Rijeka
ROSEMARY OIL—24 dms, Seville
RUTILE SAND—1,000 bgs, Lo Curto & Funk, Brisbane
SAGE LEAVES—200 bls, Sokol & Co, Rijeka
300 bls, S B Penick & Co, Rijeka
1,500 bls, Dubrovnik
SANDALWOOD OIL—7 cs, Van Amerigen Haebler, Bombay
12 cs, Lo Curto & Funk, Cochin
10 cs, Lo Curto & Funk, Calcutta
SAPONIN—10 dms, Karr Ellis, Liverpool
12 cs, A K Peters Co, Valparaiso
SHELLAC—150 bgs, Gillespie Rogers Pyatt, Calcutta
414 bgs, Wm Zinsser & Co, Calcutta
75 bgs, Mac Lac Co, Calcutta
50 bgs, H C Smith, Calcutta
66 bgs, F H Paul & Stein Bros, Hamburg
50 bgs, Mantrose Corp, Bremen
SHELLAC WAX—28 bgs, Wm Zinsser & Co, Calcutta
SODIUM ALGINATE—50 dms, Stein Hall & Co, Glasgow
SODIUM ALUMINATE—100 dms, Chemical Manufacturing Co, Liverpool
200 bgs, Chemical Manufacturing Co, Liverpool
SODIUM BICARBONATE—499 bgs, Chemical Manufacturing Co, Liverpool
SODIUM CHLORITE — 150 dms, Independent Chemical Corp, Hamburg
SODIUM CYANIDE—125 dms, Chemical Manufacturing Co, Liverpool
320 dms, Ugine Industries, Havre
SODIUM PERBORATE—1,500 bgs, South American Minerals & Merchandise Corp, Rotterdam
SODIUM PERBORATE MONOHYDRATE—200 bgs, Independent Chemical Corp, Bremen
SODIUM PERBORATE TETRAHYDRATE — 2,0 bgs, Chemical Manufacturing Co, Liverpool
500 bgs, London
SODIUM SILICOFLUORIDE—100 bgs, Impex Overseas Corp, Rijeka
STARCH—600 bgs, Geismar & Co, Bremen
STRYCHNINE—2 cs, Lo Curto & Funk, Liverpool
SULFANILAMIDE—4 dms, Copenhagen
o-SULFONBENZIMIDE—30 dms, D Hauser, Yokohama
SULFUR, PRECIPITATED—38 bgs, J M Rogers Co, Liverpool
TALC—16,500 bgs, Charles Mathieu, Genoa
TANNIC ACID—35 dms, J E Bernard, Glasgow
TAPIOCA FLOUR—400 bgs, Manhattan Adhesive Corp, Itajai
1,000 bgs, Poons Co, Itajai
3,300 bgs, Stein Hall & Co, Itajai
400 bgs, Morningstar Paisley Inc, Itajai
600 bgs, Stein Hall & Co, Imbituba
TARA POWDER—2,077 bgs, Foreign Domestic Distributors, Callao
TERPIN HYDRATE—20 cs, Havre
THEOBROMINE—4 dms, Havre
TITANIUM DIOXIDE—1,400 bgs, Nylos Tradi Co, Genoa
TOLU BALSAM—5 dms, Wessel Duval & Co, Cristobal
6 dms, Meer Corp, Cristobal
25 cs, Barranquilla
TONKA BEANS—23 cs, S B Penick & Co, Mana
TRICHLOROETHYLENE—25 dms, Henley & Hamburg
150 dms, Gothenburg
TUNG OIL—200 tons, Buenos Aires
ULTRAMARINE BLUE—390 bgs, Whittakers Cla & Daniels, London
120 bgs, Antwerp
UREA, SYNTHETIC—1,393 bgs, Chemical Manufacturing Co, Liverpool
VETIVER OIL—2 dms, Ufinindo International Corp, Port Au Prince
3 dms, Port Au Prince
ZINC CHLORIDE—82 dms, Riches Nelson, Antwerp
30 dms, National City Bank, Antwerp
ZINC OXIDE—1,000 bgs, Aceto Chemical Co, Liverpool
600 bgs, Havre
ZIRCON SAND—9,031 bgs, Lo Curto & Funk, Brisbane
1,991 bgs, Sydney

Los Angeles

ANTIMONY OXIDE—300 bgs, Hull
CALCIUM NITRATE—10,000 bgs, Wilson & Meyer & Co, Heroya
CASSIA—167 bls, H M Newhall & Co, Saigon
CLAY, CHINA—200 bgs, Paper Makers Co, Rotterdam
CORIANDER SEED—100 bgs, Rotterdam
EARTH COLORS—600 bgs, American Chemical Pigment Corp, Bremen
FISHLIVER OIL—10 dms, Van Camp Sea Fo Co, Bergen
GINGER—42 bgs, Kellys America Ltd, London
NUTMEG—25 bgs, Barclays Bank, Port of Spai
PEPPER, BLACK—250 bgs, California Commodi Corp, Belem-Para
200 bgs, Toyomenka, Belam-Para
50 bgs, Mitsui & Co, Belam-Para
PEPPER, RED—85 bgs, Hismoco American Kobe
PETROLEUM, CRUDE—131,582 bbls, Richfield Co, Singapore
132,138 bbls, Douglas Oil Co, San Lorenzo
POPPYSEED—50 bgs, Hismoco American Co, Rterdam
QUEBRACHO EXTRACT—309 bgs, Buenos Air
SODIUM CYANIDE—300 dms, C M C Chemic Inc, Hull
TAPIOCA FLOUR—2,240 bgs, Stein Hall & Kobsichang
ZINC OXIDE—1,800 bgs, Hull

Philadelphia

AMMONIUM CHLORIDE—282 bgs, Rotterdam
CALCIUM CARBONATE—1,200 bgs, Pluess Stafer, Antwerp
CALCIUM PHOSPHATE, DIBASIC—1,200 bgs, Lang, Antwerp
CASEIN—500 bgs, National Casein Co, Buenos Aires
CETYL ALCOHOL—200 bgs, Yokohama
42 dms, Yokohama
CHESTNUT EXTRACT—1,700 bgs, Barkey Imping Co, Naples
CLAY, CHINA—8,274 tons, Fowey
CORN STARCH—60 bgs, Ideal Trading Co, Antwerp
GYPSUM, CRUDE—10,755 tons, National Gyps Co, Halifax
HEXANOL—90 dms, Hamburg
MYRISTIC ACID—215 bgs, Amato Agency, Rotdam
PEATMOSS—500 bls, Halfmoon Trading Co, Rterdam
PEPPER, BLACK—400 bgs, C M Van Sillevo Cochin
240 bgs, Otto Gerdau, Cochin
240 bgs, Cochin
PETROLEUM, CRUDE—292,898 bbls, Gulf Corp, Puerto La Cruz
108,209 bbls, Gulf Oil Corp, Bachaquero
318,502 bbls, Gulf Oil Corp, Mina Al Ahmad
117,078 bbls, Atlantic Refining Co, La Salin
137,979 bbls, Atlantic Refining Co, Puerto Cruz
213,645 bbls, Atlantic Refining Co, Punta Palmas
123,419 bbls, Atlantic Refining Co, Pu Cardon
129,766 bbls, Socony Mobil Oil Co, Coven
128,000 bbls, Socony Mobil Oil Co, Puerto Cruz
TAPIOCA FLOUR—3,200 bgs, Stein Hall & Itajai
800 bgs, Jung Forwarding Co, Itajai
900 bgs, Stein Hall & Co, Imbituba
VANILLA BEANS—62 cs, Camax Co, Vera Cr
10 cs, Zink & Trieste, Hamburg
ZIRCON SAND—28,555 bgs, Brisbane

San Francisco

AMMONIUM BICARBONATE—45 dms, C M Chemicals Inc, Liverpool
BLOOD, DRIED—1,500 bgs, Myers Sales Co, Copenhagen

CALCIUM CARBONATE—1,600 bgs, Pluess Stauffer, Antwerp
CASEIN—200 bgs, First Spice Co, Rotterdam
360 bgs, J R Spellacy, Melbourne
2,198 bgs, Western Dairy Products, Melbourne
160 bgs, J Spellacy, Sydney
800 bgs, Auckland
COPRA—1,750 tons, Cargill Inc, Manila
1,303 tons, American Trust Co, Manila
250 tons, Pacific Vegetable Oil Corp, Manila
225 tons, Marwood Co, Manila
312 tons, Atkins Kroll & Co, Pago Pago
2,800 tons, American Trust Co, Cebu
500 tons, Cargill Inc, Cebu
DEXTRIN—100 bgs, Morgan Guaranty Trust Co, Amsterdam
FISHMEAL—6,422 bgs, Marine Midland Trust Co, Callao
4,348 bgs, Balfour Guthrie, Chimbote
8,652 bgs, Wilbur Ellis Co, Callao
LOCUST BEAN GUM—50 bgs, Genoa
OREGANO—400 bgs, H M Newhall & Co, Salina Cruz
OXALIC ACID—100 bgs, P W Bellingall, Amsterdam
PEPPER, BLACK—70 bgs, California Commodities Corp, Singapore
210 bgs, Singapore
POLLACKLIVER OIL—100 dms, Wheeler & Miller, Yokohama
SALICYLATES—20 dms, Barnes Hind Lab, Copenhagen
14 dms, Copenhagen
SESAME SEED—200 bgs, Lastreto Phillips, San Juan del Sur
500 bgs, B C Ireland, San Juan del Sur
SODIUM BICARBONATE—1,300 bgs, C M C Chemicals Inc, Liverpool
SODIUM TRICHLOROACETATE—300 dms, T H Davis & Co, Hamburg
ZINC SULFATE—2,000 bgs, Harrisons & Crossfield, Antwerp

Penicillin Has a Relative Touted as Much Stronger

A new drug, related to penicillin but claimed to kill bacteria immune to penicillin, has been discovered by a team of British scientists.

Identified as cephalosporin C, the drug differs from penicillin in being resistant to certain bacteria that destroy penicillin or otherwise render it ineffective, according to a report of the National Research Development Corporation, a British government organization that has been backing up research into the cephalosporin group of antibiotics.

Propionate Price Corrected

An error in price, respresenting ½ cent per pound, occurred in the December 7 article in OPD concerning an increase in sodium and calcium propionates. The new prices will be effected January 1 by Eastman Chemical Products, Inc., a subsidiary of Eastman Kodak Company. The price west of the Rockies was erroniously given as 39 cents per pound, delivered in 150-pound drums. Actually, it should have been 39½ cents. The rest of the article was correct.

HORMONES

DEHYDROCHOLIC ACID, N.F.
(Oral and Injectable Grades)
OX BILE USP
DRIED OX GALL POWDER

We invite your inquiries

GEDEON RICHTER
PHARMACEUTICAL PRODUCTS INC.
20 Exchange Place, New York 5, N. Y.

- Thyroid U.S.P. Powder
- Calcium Caseinate
- Saccharin U.S.P.
- Sodium Cyclamate NNR
- Terpin Hydrate

CONRAY PRODUCTS CO. DIV.
129A Pearl Street New York 5, N. Y.
Phone: HAnover 2-6971

VITAMIN D-2 and D-3
Stable to Minerals and Oxidation
Calciferol
Crystalline D_3 Crystalline D_3 Compound
Oil & Water Miscible (Mineral) Stable Powders
Dihydrotachysterol

PURE VEGETABLE EXTRACT COLORS
YELLOW — RED — ORANGE

BOWMAN YEAST PRODUCTS
Hickory Smoked Yeast
Primary (Torulopsis utilis) Brewers' (Sacchromyces cerevisiae)
Powders — Flakes — Extracts — Concentrates — Hydrolysates
Vitab® B-Complex Extract

SPECIALITIES
CHLOROPHYLL CAROTENE
PHYTOL XANTHOPHYLL
VIANOL®
ANTI-OXIDANT (BHT)
ENZYMATIC SYSTEMS
PROTEIN DERIVATIVES

CHARLES BOWMAN & COMPANY
220 East 42nd Street, New York 17, N. Y.
600 South Michigan Avenue, Chicago 5, Ill.
130 Central Avenue, Holland, Mich.
13160 Ortley Place, Van Nuys, Calif.
Chorney Chemical Co., Montreal, Canada

REINVESTIGATE THE SULFONATED PHENOLS

SODIUM PHENOL SULFONATE
(Sodium Sulfocarbolate)
$HOC_6H_4SO_3Na2H_2O$ M.W.232.2

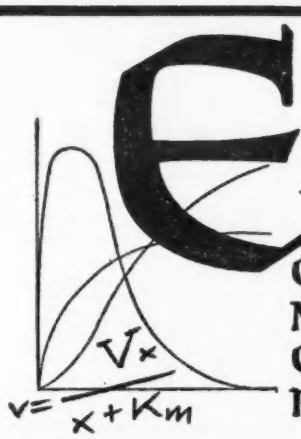
AMMONIUM PHENOL SULFONATE
(Ammonium Sulfocarbolate)
$C_6H_9NO_6S$ M.W.191.2

ANY QUANTITY . . . INCLUDING CARLOADS
Exceptional results shown in many such applications as tableting and in conditioning granular mixtures to flow freely, and other likely potential uses. Ask Dept. A, Bonewitz Laboratories, Inc. for samples, prices, deliveries.

PRINCIPAL PRODUCTS
CHARCOAL • COBALT COMPOUNDS • MANGANESE SULPHATE • GLAUBER'S SALT 10 mol. • AMMONIUM PHENOLSULFONATE • SODIUM PHENOLSULFONATE • ZINC PHENOLSULFONATE • DICALCIUM PHOSPHATE • PIPERAZINE COMPOUNDS • PEPSIN

CUSTOM SERVICES
CUSTOM MIXING OF ALKALINE AND ACID CLEANING COMPOUNDS AND TECHNICAL ASSISTANCE IN PRIVATE CONFIDENTIAL FORMULATIONS AVAILABLE AT BOTH PLANTS

BONEWITZ LABORATORIES, INC. CHEMICALS, INC.
THE BONEWITZ COMPANIES
of Burlington, Iowa and Manteca, California



ENZYMES CAN DO MORE THAN CATALYZE REACTIONS

They can trigger sales of your products. For with Wallerstein enzymes you can build new properties and new potencies into your existing preparations, and engineer completely new formulations to open up refractory markets. For example? Correctives for digestive enzyme imbalances and insufficiencies—debriding agents—materials for cosmetic therapy—veterinary products, too!

Now—Standardized Amylases and Proteases
Notice that we said *Wallerstein* enzymes. This isn't just proud talk. Wallerstein's Mylase® and Prolase® have the strength, purity and *guaranteed uniform activity* you need for critical pharmaceutical and cosmetic uses. (We have done away with folklore—we can give you *assays*.) Whether you need a diastase 10 times stronger than ordinary fungal enzymes, or a 300 unit proteolytic enzyme, Wallerstein can supply you the rigidly controlled material you must have.

Non-Standardized Ideas
Wallerstein can put more than 50 years' experience to work on *your products, your specific problems.* Contact Gerry Gray for full technical information and price schedules.

WALLERSTEIN COMPANY
Division of Baxter Laboratories, Inc.
Wallerstein Square, Mariners Harbor
Staten Island 3, New York
GIbraltar 2-6400

Wallerstein Manufactures Enzymes and Antibiotics for the Pharmaceutical and Cosmetic Industries

Announcing

a great new name in essential oils

GUARANTEED TOP-QUALITY! Only the finest essential oils produced by Minute Maid carry the "Sunfilled" brand. Oils of lesser quality are available unbranded at lower cost.

Guaranteed pure! All "Sunfilled" oils are produced and packed under continuous inspection of the U.S. Department of Agriculture! They come to you protected by tamper-proof seals. No adulteration or sophistication is possible.

Guaranteed supply! As America's largest supplier of citrus products, Minute Maid provides an ample, assured, dependable source for all your essential oil requirements.

Complete line! Only Minute Maid offers a complete line of both Florida and California citr oils—all-Valencia Florida or California oran oil and California lemon oil, all Cold Press U.S.P.; also Cold Pressed grapefruit, lime a tangerine oils.

For further information, price quotatic or service, write or phone today.

CITRUS PRODUCTS DIVISIO
MINUTE MAID CORPORATION
Orlando, Florida
New York, N.Y.: 420 Lexington Avenue • OREgon 9-8755

Essential Oils, Aromatics

The only real news this week seems to be about Florida orange oil. From its previous high, 68 cents per pound, it came down 13 cents to 55 cents per pound. Dealers report the abundance of oil available accounts for the drastic decline. The drop, however, has not been noted on the price lists of all essential oil dealers. Some companies continue to charge 70 cents per pound for their material. In spite of reports that the alpha and beta ionones are rising in price, the changes that have been noted by various dealers in the New York area have not altered the prices in this publication.

Price Trends

Advanced

None

Reduced

Bergamot, natural, Italian, $1 per lb.
Cardamom, $1 per lb.
Citral, 25c. per lb.
Lemongrass, 20c. per lb.
Orange, Florida, 13c. per lb.
Tanzy, 90c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
146.19	146.67	146.43	147.87

For Current Prices See Page 9

Alpha continues to range between $3.75 and $4.15 per pound and beta continues to range between $4.20 and $4.90 per pound.

It is true that lemongrass has witnessed substantial gains during past weeks, but according to essential oil and aromatic dealers, it usually takes 6 months for the various derivatives to reflect such advances.

In the meantime, lemongrass has levelled off on spot with some dealers quoting prices as low as $1.75 per pound. This, is not the consensus of the dealers. Most of them continue to charge around $2 for their material.

News from source, however, serves to confuse the total lemongrass picture. The latest word is that lemongrass is tending upwards.

Statistically, the 1958-59 (May to April) crop of lemongrass oil produced in southern India is estimated to be 950 tons. This is considerably smaller than the previous year's crop, 1,400 tons.

It is because the crop is reputed to be so small that shippers are hopeful that prices will remain firm until the middle of 1960.

Acreage was smaller, shipping information points out, because prices last year were so low that the growers didn't feel it was worth their while.

Last year, for instance, the prices went as low as 90 cents per pound and the year before, the low was 85 cents per pound.

In 1956, it never fell below $1.65 per pound.

The remaining changes are relatively minor. Citral came down 90 cents per pound, cardamom came down $1 per pound and natural Italian bergamot came down $1 per pound.

Essential Oils

Bergamot—Natural Italian material, in cans has been reduced in price from $12.75 to $11.75 per pound, according to the weekly market survey of essential oil dealers here in the New York area.

This reduction might possibly be related to the producing season of the oil. Harvesting is usually begun in December and completed in mid-March. The new crop, part of which is expected here next week is estimated to be some 160,000 kilos.

After the harvest, the trees are pruned lightly. Then in May or June they are irrigated for a period of one or two weeks, depending on the moisture already in the soil.

Cardamon—From the previous listing, $40 per pound, cardamon oil has been reduced in price to $39 per pound.

As far as the cardamon season is concerned, planting in Mysore, is done early in the year—either February or March. The first harvest, however, is not gathered for five years. The initial plantings remain fruitful for eight years.

According to technical data, the cardamom capsules must be gathered from the fruit stems just before maturity while they are still somewhat green—beginning to turn yellow.

If they are left on the fruit stems, they will split and eject their seeds. The capsules are carefully cut off with scissors today rather than carelessly pulled off as they were in days of yore.

The essential oil and principal flavoring agent that people have come to think of as cardamom, is contained almost completely in the seed within the capsule.

Traders, however, take special pains to see that the capsules are meticulously dried, and cleaned. They are placed on dry mats and set out in the sun. They cannot be allowed to dry too rapidly because the capsules might swell, burst and thereby lose some of their seeds.

When the capsules are dried, the pieces of attached stalks, called pedicels, are cut off or rubbed off. Then the capsules are graded into different sizes by sieves and dried in the air before they are packed into cases for shipment.

Citronella—News from source is that Formosa material is up 5c. per pound. This increase hasn't yet served to up the spot price, but it has been largely responsible for firming the market here in the New York area.

This publication continues to list both Formosa and Jamaica material at 80c. per pound.

Nobody seems to be interested anymore in the self-imposed quota the Formosans placed on their 1959 exports. At first, they said it would be 10 percent above 1958's 4,000,000 pound level. Then a few weeks ago, it was announced that the 4,400,000 pound quota had been filled and that the quota would be upped to 5,000,000 pounds.

Even if this latest level has been reached, it is of no great concern to citronella users. It is unlikely that shipments would be discontinued just to adhere to a rather arbitrary regulation and even if they were, it would be but a matter of days before 1960 and a new quota.

Geranium—Bourbon material is reported to be some 10 percent weaker now than it was a week ago. This news is from source.

Spot prices have not changed accordingly. Algerian continues at $19 per pound and Bourbon continues at $18 per pound.

Ocotea Cymbarum—No spot rises were reported last week, but news from shippers is that material is increasingly difficult to obtain. Prices continue to range between 48c. and 55c. per pound.

Orange—From last week's low, 68c. per pound, Florida material dropped to 55c. per pound. Dealers here report simply that there is an abundance of oil available.

This price holds true for all Florida oil, although it is known that most all the districts of Florida produce a slightly different type of orange.

The reason there is such a variety, according to agricultural information received here, is because of the varieties of climate and soil in the state. The Parson Brown orange, for example, matures earlier in the Hammock sections of north central Florida than it does in the areas farther south.

The Valencia variety, though, is not popular in the north because it ripens late, thereby making it susceptible to frosts.

It is true, however, that during the past 40 years, there has been a monumental effort to standardize the Florida orange and, consequently, the orange oil.

Peppermint—The feeling among essential oil dealers here in the New York area is that peppermint is definitely levelling off at its rather high prices. It continues to range between $4 and $4.60 per pound for the natural and between $4.25 and $5.25 for the redistilled.

The crop is reported to be a good one and speculation is that peppermint oil producers are waiting, for income tax pur-

Imports Detained at N.Y.

Week Ended December 4, 1959

Black pepper, 2 lots, 140 bags.
Cassia, 17 lots, 1,767 bales.
Cloves, 100 bags.
Coriander seed, 6 lots, 1,950 bags.
Cumin seed, 100 bgs.
Nutmegs, 5 lots, 655 bags.
Oregano, 23 bags.
Pimento, 50 bags.

PUT THIS POWERFUL URGE TO BUY IN YOUR AEROSOLS

In MM&R's enlarged, modern aerosol laboratory new perfume oils are being created constantly to keep abreast with rapid advances and to meet specific requirements of our customers in increasing the salability of their pressurized products.

Write for full information.

MAGNUS, MABEE & REYNARD, INC.
The World's Most Famous Supplier of Essential Oils, Basic Perfume Oils, and Concentrated Flavors.
16 DESBROSSES STREET • NEW YORK 13, N. Y.

VANILLIN USP
ANETHOL USP
METHYL SALICYLATE USP

PENICK
PERFUMES, FLAVORS AND AROMATICS DEPARTMENT

S. B. PENICK & COMPANY
100 CHURCH ST., NEW YORK 8
735 W. DIVISION ST., CHICAGO 10

ESSENTIAL OILS • PERFUME OILS • FLAVORS • AROMATIC CHEMICALS and ODOR MASKS
Proven Replacements For: BERGAMOT OIL, CITRONELLA OIL, ANISE OIL, CASSIA OIL
DOMESTIC EXPORT — YOUR INQUIRIES SOLICITED
D. W. HUTCHINSON & CO., INC., 700 South Columbus Ave., Mount Vernon, N. Y.
Founded 1896 — Telephone: Mount Vernon 4-7272

AEROSOL BOUQUETS
FLAVORING EXTRACTS
MASKING ODORS
for INDUSTRIAL PURPOSES

by Florasynth LABORATORIES, INC.
900 VAN NEST AVE., NEW YORK 62, N. Y.
Chicago 6, Los Angeles 21, and other principal cities in the U.S., Canada and Mexico

We at FRITZSCHE BROTHERS, Inc., *send you*

Season's Greetings

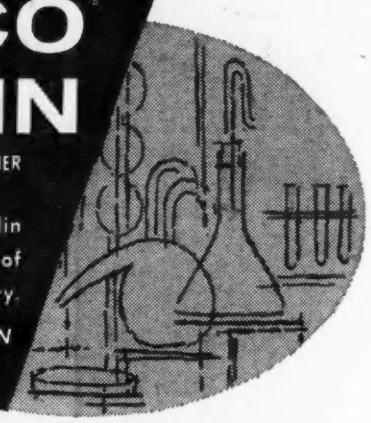
And All Good Wishes for the New Year

ZIMCO VANILLIN

U.S.P. A QUALITY VANILLIN WITH FINER AROMA, BODY AND FLAVOR

Zimco is the natural source vanillin which has become the standard of excellence throughout the industry.

The Original Lignin *VANILLIN*



Specify

Parakeet®

BRAND OF

CERTIFIED FOOD COLORS

WORLD'S LARGEST SUPPLIERS OF VANILLIN

Sterwin Chemicals Inc.

SUBSIDIARY OF STERLING DRUG INC.

1450 BROADWAY, NEW YORK 18, N.Y.

2020 Greenwood Street, Evanston, ILL.

Branch Offices and Warehouses in Leading Cities

STERWIN

BETTER FRAGRANCE... THROUGH RESEARCH!

The unusual emphasis we have placed through the years on pure research into the mysteries of aromatic chemistry, has developed many new and successful concepts in fragrance. These contributions of chemical research have provided the creative perfumer with greater opportunities to produce new and outstanding fragrances for the products of tomorrow.

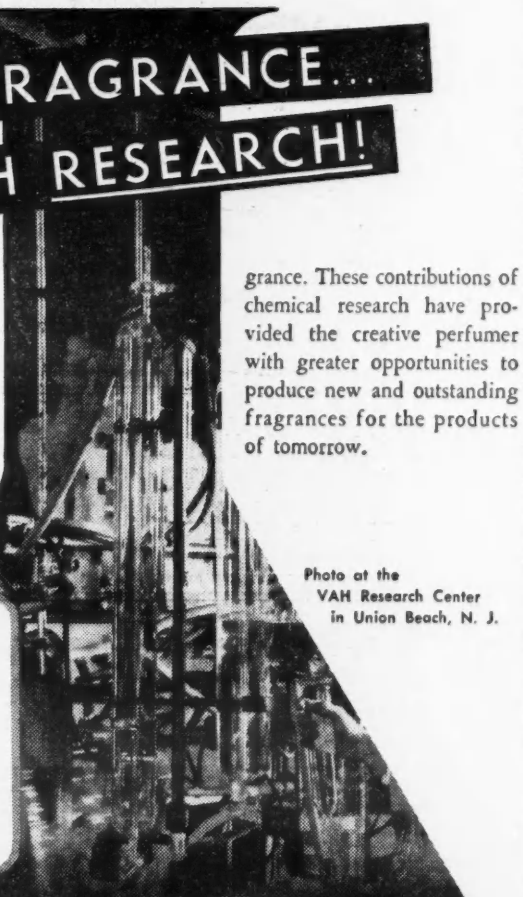


Photo at the VAH Research Center in Union Beach, N. J.

Similar research in the realm of flavor, has made

Alva FLAVORS

the ultimate answer to palatability problems in drugs and proprietary medicinals.

For tomorrow's touch in fragrance . . . come to VAH today!

van Ameringen-Haebler

A Division of International Flavor & Fragrances Inc.

521 West 57th Street • New York 19, N. Y.

Essential Oils

poses, for the beginning of the year before they make material readily available.

Spearmint—In spite of the fact that the 1959 crop of spearmint oil is classified as a bumper crop, it is virtually impossible for dealers to buy material from source.

The latest report is that material just isn't available.

Prices continue at their unusually high level—ranging between $9 and $11.25 per pound.

Tansy—After a survey of the essential oil dealers in the New York area, we are revising our tansy oil price. It is down from $7.50 per pound to $6.50 per pound.

Agriculturally speaking, the tansy plant is cut while the blooms are flowering, which is usually in mid-August.

It is interesting to note that some tansy plants have been known to live for 25 years.

Aromatic Chemicals

Citral—From its previous high, $3.75 per pound, this aromatic has been reduced to $3.50 per pound.

Seeds and Spices

Cassia—Material from Batavias and Korintjes is firm in price and is apt to advance with a pick-up in demand, according to dealers here in the New York area.

Ginger—The most economically priced ginger is that from Nigeria. Couchin material is strong and African is very strong, it is reported.

Pepper—Most peppers are listed at prices right around the half-dollar per pound level. For example, Lampong is selling for 50c. per pound and Brazilian at 48c. per pound.

According to the Foreign Agriculture Circular, prepared by the United States Department of Agriculture, Indonesian output of pepper during 1958 is estimated at 33.2 million pounds, compared with 53.1 million and 52.8 million pounds during 1957 and 1956.

Production last year consisted of 30.0 million pounds of black and 8.2 million pounds of white pepper. The quantity of black pepper was about equal to the 29.4 and 29.1 million pounds produced during the previous 2 years.

However, the outturn of white pepper (8.2 million pounds) was much lower than the 23.7 and 23.6 million pounds during 1957 and 1956.

This reduction in white pepper was unexpected since most of it is produced on the islands of Bangka and Billiton.

The decline could be a result of low prices, neglect of gardens and spread of disease. Pests and diseases in Bangka cause much damage. Yellow diseases, which attacks roots, is the most serious obstacle to pepper production.

A decrease in production of black pepper during 1957 has been expected, but did not occur.

During the 10-year period 1946-1955, production of black pepper had exhibited a regular "on" and "off" year. However, since 1956 black pepper production has remained relatively stable.

Apparently new plantings made during 1949 and 1950 entering into full production during 1956 and 1957, disrupted the cyclical pattern.

Vanilla Beans—The market quieted down considerably last week when vanilla bean dealers learned that the Food and Drug Administration deferred its decision on frozen dessert labeling for some two weeks.

Prices were reduced slightly: For example Bourbon material and Mexican whole material, came down from $15 per pound to $14.50 per pound while Mexican cut material came down from $15 per pound to $14.25 per pound.

Dealers and customers are reported to be figuratively marking time until the FDA decides how specific labels, especially on ice cream, will have to be in the future.

The regulation under advisement is that manufacturers of vanilla ice cream, for instance, must put on the label what they put in the product. If the product is flavored with a synthetic vanilla flavor, such as vanillin or ethyl vanillin, it must be so stated on the label.

Vanilla bean producers and dealers, of course, are hopeful that the FDA will require the strictest sort of labeling so that they will be able to take advantage of the alleged stigma attached to the word "artificial."

MCA Takes a Peek

—Continued from page 7

the average for all manufacturing was 152. The index of 217 for September established a new monthly high. The average index for 1957 and 1958 was 184. Production has doubled in the past decade.

Inventories: Present inventories are said to be in satisfactory balance. An inventories-to-sales ratio of slightly less than two to one generally is considered desirable for the chemical industry. In the first half of the year the inventory level changed little, averaging $3.725 billion a month while sales averaged slightly more than $2 billion. By October, according to preliminary data, inventories stood at $4.008 billion and sales at $2.208 billion for the month.

Prices: The wholesale price index for chemicals remains steady, showing 110 for the preliminary October figure while the 1958 and 1957 figures for the same period were 110.2 and 110.4. The price index for all commodities (except farm products and food) was reported at 128.5—up more than two points from the October 1958 figure.

As 1959 advanced, price trends were mixed for chemicals. Because of cokeoven stoppages in the steel strike, crude naphthalene was in short supply in the third quarter, for example, precipitating a sharp rise in price. Nitrogen fertilizer materials continued to show strength. Plastics and synthetic rubber showed the same stability as the larger chemical groups. Synthetic rubber benefited from the recent price upswing in natural rubber with the export market showing a 47 percent increase for the seven months ending with July.

Aluminum sulfate was down in price and output and consumption is expected to reach record size. Two important vitamin products, ascorbic acid and riboflavin, were down somewhat despite their broadening use in foods and pharmaceuticals. Pesticides posted another excellent year with prices steady. Other downward changes came for maleic anhydride and fumaric acid, both moving into expanded polyester resin markets. Nylon tire cord prices recently were revised downward.

Assets: Total assets for the chemical and allied products industry stood at $22.468 billion at the end of the second half, giving the industry fourth rank in assets size, exceeded only by petroleum refining and related industries, primary metals, and transportation equipment. At the end of 1958, the industry's assets were reported at $21.518 billion.

Capital Expenditures: Chemical industry expenditures for new plant and equipment are estimated at $1.248 billion in 1959, compared with $1.320 billion in 1958 and the record $1.724 billion invested in 1957. For nine consecutive years the industry has invested more than $1 billion annually in capital expenditures and the average for the past fourteen years is more than $1 billion.

Employment: Employment averaged 844,600 during the first 10 months of 1959, well above the 1958 average of 820,900 and almost up to the 1957 high of 844,800. The preliminary figure for October was 859,000—the highest October figure on record.

FLAVORS PFW SCENTS

POLAK'S FRUTAL WORKS INC., MIDDLETOWN, N.Y.

FAIRMOUNT CHEMICAL CO., INC.

117 BLANCHARD ST., NEWARK 5, N.J.

ACETOIN

FOR BUTTER FLAVOR

Trade Name Chemicals & Specialties

Industry and the ultimate consumer alike have been snatching up emulsion and latex products just about as fast as advancing technology has been able to develop new ones. This is true of not only of the styrene-butadiene latexes along with their continual technical improvements, but of the entire series of synthetic resin-suspended particles in aqueous media. Both internally and externally plasticized acrylic, vinyl and other families of homopolymer and copolymer products are finding new applications in the paint, textile, paper and other assorted industries. Products, originally only for interior use because of poor external durability, are now being reformulated into lasting, weather-resistant, stable exterior finishes.

Types of metals which can be chelated are numerous. However, these can be classified as the metals which form stable di- or polyvalent ions. Widely used chelate formers are the alkaline earths and the transition metals. Alkali metals such as sodium and potassium are unaffected. Trivalent chromiums, aluminum and iron, on the other hand, form chelates readily under acid conditions, but the chelates come out fairly unstable at a high pH. The most troublesome metal to control after calcium and magnesium is iron. Naturally, with the differences between metals in atomic structure and chemical reactivity, the strength with which they are chelated also varies.

WHAT'S REPORTED ON HERE

Though coverage in the Trade Name Chemicals & Specialties market report encompasses twenty classes of chemicals, only a few of them are mentioned in this issue. Here's the entire list:

Adhesives, antibacterials and fungicides, antifoaming agents, antioxidants, antistatic agents, blowing agents, catalysts and accelerators, chelating agents, chemically processed oils, emulsions and latexes, enzymes, fatty acid derivatives, feed supplements, filtering materials, ion exchange resins, surfactants, synthetic waxes, textile chemicals, thickening and suspending agents, and ultraviolet absorbers.

If you have suggestions for any additional materials that might be included in this section, write OIL, PAINT AND DRUG REPORTER'S Technical Editor, 30 Church street, New York 7.

Chelating Agents

Antara Chemicals, a division of General Aniline & Film Corporation, has on the market the **"Nullapons"** which are described by the company as being outstanding sequestering or chelating agents capable of controlling, by deionization, undesirable di- or tri-valent metal ions in aqueous solutions.

Listing the grades, **"Nullapon BF-12"** is standard liquid with an active content of 25 to 27 percent tetra sodium ethylenediamine tetraacetate; **"Nullapon BF-13"** is a concentrated liquid with 38 to 40 percent active principal; **"Nullapon BF-78"** is dustless flakes in form having 78 to 80 percent active content; and **"Nullapon BF Acid,"** which is the technical, pure acid powder grade being 99 percent active ethylenediamine tetraacetic acid.

Concerning stability properties, Antara claims that all **"Nullapons"** as supplied are completely stable to storage. Also, dilute solutions of **"Nullapons"** are stable. Furthermore, Antara says that the chemical structure of these chelates remains stable at 150°C. More specifically, **"Nullapon BF Acid"** is said to be stable in 10 percent sulfuric acid, and **"Nullapon BF-12, BF-13** and **BF-78"** are stable in 15 percent caustic.

Antara goes on to say that strong oxidizing agents slowly decompose the **"Nullapons,"** but this is not limiting to them in such products as peroxide or perborate solutions during processing or use. Antara suggests that the **"Nullapons"** not be stored in aqueous solutions of strong oxidizing agents.

With regard to the effect of pH, Antara states that **"Nullapons"** can be adjusted to any pH between 3.5 to 13.0 and remain effective against metal ions. Antara explains that calcium and magnesium are not efficiently chelated by the mono- or disodium salts, and at a pH of 5 **"Nullapon"** has only 40 percent effect on calcium as it is at pH 7.5. However, if calcium and magnesium are controlled at pH above 7.5, then all metals appearing higher on the list are controlled. Finally, Antara states that **"Nullapon BF Acid"** may be neutralized with a variety of bases to prepare specific salts for special uses. Alkyl amine salts may be combined with **"Nullapon BF Acid"** to form solvent soluble salts, and may be solubilized in any alkaline systems.

Pfanstiehl Laboratories, Inc., produces **"Seqlene,"** which essentially is a mixture of the sodium salts of closely related, nontoxic polyhydroxy acids, and are said to be efficient chelating or sequestering agents for metallic ions in strongly alkaline solutions.

According to Pfanstiehl, **"Seqlene Crystals,"** as now made, are the alpha isomer of sodium glucoheptonate. Other **"Seqlene"** products are more complex mixtures of sugar acids or their sodium salts, and contain no gluconates. The various isomers, continues the company, are about equal in chelating capacity.

Being effective in alkaline solutions, Pfanstiehl states that **"Seqlene"** finds application in the general field of alkaline de-rusting and cleaning and in the softening and treating of hard or rusty water. Besides chelating calcium and iron, **"Seqlene"** is said to be effective with other polyvalent metals such as aluminum, copper, nickel, etc. Furthermore, **"Seqlene"** may be used in combination with other common cleaning agents such as caustic alkalis, phosphates, silicates and wetting agents.

Pfanstiehl has a long list of possible applications for **"Seqlene."** The company says that it imparts good performance at low costs when combined with caustic alkalis either with or without added phosphates and wetting agents to bottle washing solutions. In metal cleaning, **"Seqlene"** is used to dissolve surface rust, and it sequesters various non-ferrous metals. In textiles, Pfanstiehl explains that amounts of caustic are used in processing cotton, resulting in iron-staining problems. **"Seqlene"** in caustic is said to be exceptionally good in sequestering and dissolving both ferric and ferrous compounds and also non-ferrous metals, and will hold some of these compounds in solution even if the pH is later lowered below the neutral points. Other applications listed by Pfanstiehl include use in electroplating, cleaning food processing machinery and equipment, rubber, and pulp paper.

Emulsions & Latexes

The chemical division of Goodyear Tire & Rubber Company has a fairly recent addition of their **"Pliolite"** line called **"Pliolite Rubber Latex 5352."** This is said to be a high solids product developed primarily for use in 100 percent synthetic foam compounds.

Polymerized in a cold emulsion system, Goodyear says that **Pliolite Latex 5352"** is a large particle size, 70/30 butadiene styrene latex. The company also claims that the product has good viscosity-temperature properties over an 80 to 40°F. range; and this feature, explains the company, permits a wide safety margin when storing or handling the latex during cold weather.

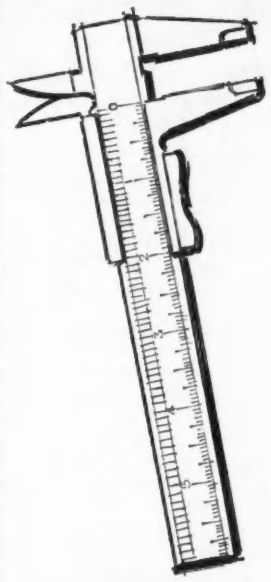
According to Goodyear, **"Pliolite Latex 5352"** has excellent processability, good resistance to heat and light discoloration and outstanding flex life and compression set life. To obtain the best physical properties and foam structure Goodyear suggests that **"Pliolite Latex 5352"** be used at maximum solids and not diluted with water.

Goodyear goes on to list what they consider are the advantages of synthetic rubber latex over natural rubber latex. One important factor, states the company, is the stable price structure of 100 percent synthetic **"Pliolite Latex 5352."** Furthermore, the consistent quality of **"Pliolite Latex 5352"** is an advantage over the seasonal variances of natural rubber latex properties.

Typical applications of **"Pliolite Latex 5352"** include use in foamed carpet backing, in core molded foam stock and in slab stock.

Firestone Plastics Company, division of Firestone Tire & Rubber Company, makes available **"Butaprene PL-13,"** for use in

—Continued on page 66



HOW DO YOU MEASURE THE MERITS OF POLYGLYCOLS?

Find the polyglycol that fits your requirements exactly! Wyandotte's complete line includes:

- The PLURACOL® E series — ten poly-*ethylene* glycols, each with a specific average molecular weight . . . the series ranges between 200 to 6000.
- The PLURACOL P series — four poly-*propylene* glycols, each with a specific average molecular weight . . . this series ranges between 400 to 2000.

Contact us today!

Wyandotte CHEMICALS
MICHIGAN ALKALI DIVISION

Wyandotte Chemicals Corporation, Wyandotte, Michigan. Offices in principal cities.

Get it First . . . . . .
Get it All . . . . . .
Get it Straight . . . . . .
. . . . . in OPD

POLY-TERGENT

J-200 J-300 J-400 J-500
G-200 G-300 B-200 B-300

MATHIESON
nonionic
surfactants

Olin Mathieson's Surfactants are effective in a wide range of industrial applications as detergents, dispersants, emulsifiers, and wetting agents. They have found wide acceptance in the textile, pulp and paper and paint industries.

The characteristics of one or more of the Poly-Tergent group may be exactly suitable for applications in your own operations. You can easily check their properties against your particular requirements.

NEW—Technical data sheets are available for each Poly-Tergent. Write for a set today.

Poly-Tergent® is a trademark

MATHIESON
OLIN MATHIESON
CHEMICAL CORPORATION
Chemicals Division • 745 Fifth Ave., N. Y. 22, N. Y.

SYNPRO STEARATES

- ZINC STEARATE USP, COSMETIC, TECH.
- ALUMINUM STEARATE (All Types)
- CALCIUM STEARATE
- BARIUM STEARATE
- MAGNESIUM STEARATE USP, TGA Specs.
- CADMIUM STEARATE and others

30,000 lb. lots available for single shipments . . Also producers of laurates, palmitates, and others

SYNPRON stabilizers for Vinyl Compounds

SYNTHETIC PRODUCTS COMPANY

Since 1917

1636 Wayside Road, Cleveland 12, Ohio • Phone: KE 1-6010

CHAS. L. READ & CO., INC.

1 NEWARK AVENUE, JERSEY CITY, N. J.

Phone: NEW JERSEY DE 2-2062 NEW YORK WO 4-1131

THE GREATEST NAME IN TURPENTINE

GUM SPIRITS • STEAM DISTILLED • SULPHATE

OPD REPRINTS 35¢ A COPY

Phthalocyanine Pigments
DOP and DIOP
Titanium Pigment

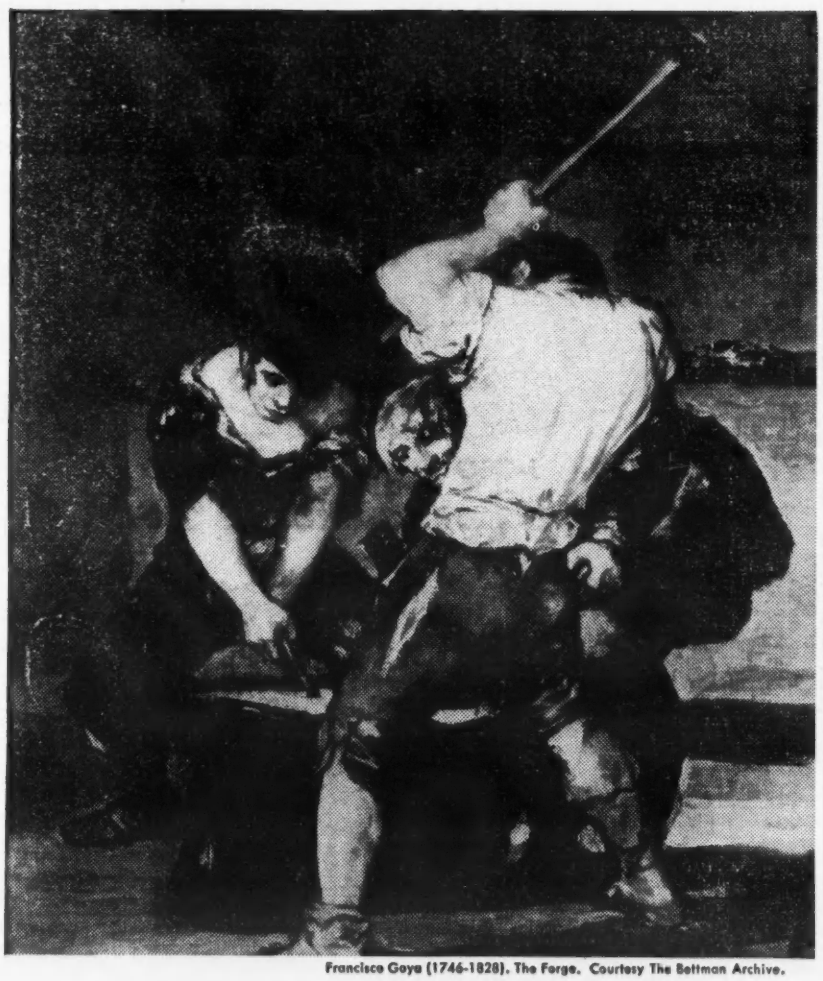
OIL, PAINT AND DRUG REPORTER
Reprint Department
30 Church Street, New York 7, N. Y.

OPD REPRINTS 35 CENTS

LYSINE

OIL, PAINT AND DRUG REPORTER
Reprint Department
30 Church Street, New York 7, N. Y.

Heyden looks at the classics



Francisco Goya (1746-1828). The Forge. Courtesy The Bettman Archive.

"I knew we'd have this gel trouble unless we ordered Heyden's uniform Pentek!"

For non-gelling alkyds – rely on Heyden. Next time, drop the hammer and specify uniform Pentek® or Monopentek®. 2109

HEYDEN CHEMICAL DIVISION

Heyden Newport Chemical Corporation

342 Madison Avenue, New York 17, New York

Coatings Materials

As usual at the end of the year announcements have been made of price changes in various coatings materials effective January 1 of the new year. In the advanced column are: CP chrome green and molybdated orange which will be one cent firmer and pigment green B, to be 5 cents higher. In the reduced column is naphtol ITR red toner, slated to be 50 cents per pound lower. One producer of phthalates has announced intentions of raising prices of dibutyl, di-iso-octul and dioctyl phthalates on the first. Other producers of the same materials, however, commented that they had no intention of going along with these advances. In the synthetic resins market a major producer of epoxy resins will increase prices of several grades of epoxy solutions as of January 1.

Effective last week were ½ cent declines in lead oxide red, litharge and mineral orange. Reductions were said to be as a result of easing lead metal prices, not due to any change in statistical positions of the oxides.

Seasonal influences are having their effect on the casein market. Business is slow with very few orders coming into the Argentine as a result of the approaching holidays. New crop production in the Argentine for the three producing months is put at 14,000 pounds.

January 1 Price Changes

Advanced

Chrome green, CP, 1c. to 2c. per lb.
Dibutyl phthalate, 2c. per lb.
Di-iso-octyl phthalate, 4c. per lb.
Dioctyl phthalate, 4c. per lb.
Molybdated orange, 1c. per lb.
Pigment green B, 5c. per lb.

Reduced

Naphthol, ITR red toner, bbls., 50c. per lb.

Elsewhere in the market, aluminum paste and powder have been put on the list of allminum-controlled materials to which aluminum pigment producers will have to give priority on orders coming from defense contractors. This is because of revised regulations issued by Business & Defense Administration. The new regulation is only in effect if there is a strike. Pigment and paste are effected indirectly as it is atomized aluminum used in defense applications. But should there be a shortage raw materials would be used to make atomized material at the expense of paste and powder.

Synthetic Resins

The following figures show sales in pounds for September with August figures included for comparison, as reported by the Tariff Commission:

Sales

	August*	September
Phenolic and other tar acid resins:		
Molding resins	17,288,848	18,242,820
Laminating resins	4,731,749	5,075,319
Protective coating resins, unmodified, modified, except by rosin	1,987,149	1,690,688
Urea and melamine resins:		
Protective coating resins, straight, modified	2,286,718	2,737,888
Vinyl resins:		
Total all types	89,279,972	92,073,291
Alkyd resins for protective coatings:		
Phthalic anhydride types, unmodified	10,886,786	10,486,010
Modified with tar acids, rosin, and/or other materials except styrene	3,844,243	3,840,399
Polybasic acid types except phthalic:		
Unmodified	361,009	452,721
Modified with tar acids, rosin, and/or other materials except styrene	561,590	323,276
Rosin modifications for protective coatings:		
Rosin, rosin esters, unmodified (ester gum, esterified with glycerol)	975,221	1,132,458
Esterified with other alcohols, pentaerythritol, glycols, etc.	831,435	1,325,936
Rosin, rosin esters, modified:		
Modifications with phenolic and other tar acid resins	2,251,993	1,927,434
Modifications with maleic and fumaric acids	2,690,383	2,851,499
All other modifications	4,924,521	4,755,045
Coumarone-indene and petroleum polymer resins	24,058,312	24,114,973
Miscellaneous synthetic plastic and resin materials, including silicone resins	16,532,793	18,200,368

* Revised.

Epoxy Resins—A major producer of these resins last week announced a new price schedule for several grades as of the first of January of 1960. Prices of epoxy resin solutions are slated to rise. The changes are being made, explains the company, because of increases in container and handling costs, and the new prices will be more in line with actual present costs of preparation of solutions.

Since their introduction a few years ago, the growth pattern of epoxies has been steadily upward as technical utilization of their outstanding properties has been made by protective coatings, adhesives, and more recently polyesters producers. Also, as production volume has increased, prices have been decreased and this has led to a faster growth situation than normal.

Price Trends

Advanced

None

Reduced

Casein, Argentine, ½c. per lb.
Lead monosilicate, ½c. per lb.
Lead, red, ½c. per lb.
Litharge, ½c. per lb.
Mineral orange, American, ½c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 19, 1958
103.03	103.03	103.03	103.09

For Current Prices See Page 9

Prime Pigments

Dry Colors—Included in the announcements of price changes effective January 1, 1960, are advances in chrome green, molybdated orange, and pigment green B. Also, there was a reduction announced for naphthol ITR red toner.

Chrome green prices will be up 1c. to 43c. for 1 to 15 percent grade, 44c. for 16 to 30 and 31 to 45 percent grades, 45c. for 45 to 49 percent, and 20c. per pound for reduced color chrome green. Molybdated orange, also 1c. firmer, will be listed at 49c. per pound. Pigment green B is slated to be 5c. higher at $1.50. Naphthol ITR red toner, on the other hand, will decline 50c. to a new price of $5.

As often happens, there may be some advanced buying before the prices take effect. On November 1, price increases in chorme yellow and orange were put into effect, and advance buying in October in anticipation of the rises was reported.

Lead Pigments — Major producers dropped prices of lead red, litharge, and mineral orange last week. A general decline of ½c. per pound was announced for carlot and less carlot quantities alike.

New schedule for lead oxide red, 95 percent, is 14¾c. and 15¾c. per pound for carlots and less carlots in that order; .1495c. and .1595c. for 95 percent grade; and .1510c. and .1610c. per pound, carlots and less carlots respectively for 98 percent lead oxide red.

Litharge is now being quoted at 14¼c. for carlot quantities, and 15¼c. per pound for less carlots. Mineral orange price is now 16c. and 17c. respectively for carlots and less carlots.

There has been no significant statistical change in the position of the oxides to influence the decline. Rather, price reductions were attributed by producers to a generally softer tone in the listing of lead metal. Price of lead metal last advanced on August 31 and continued at that quoting until last week, but trade reports have shown a lower trend.

Aluminum Paste & Powder—These two items recently have been added to the list of aluminum-controlled materials to which producers of aluminum pigments must give priority on orders from defense contractors. This is as a result of a revised regulation issued by Business & Defense Administration. There is no shortage at the time of aluminum pigments. The new regulation is only operative if there is a strike in the aluminum or the transporatation industries. Possibility of an aluminum strike are not too out of bounds as aluminum has the same union as the steel industry coupled with the fact that the dock labor contract is as yet unsettled.

Aluminum pigment used for defense is the atomized, also used in explosives and in an epoxy filler. If a shortage of atomized aluminum should occur, however, producers would have to use raw materials to make the atomized sacrificing the paste and powder grades.

Lacquer Materials

Plasticizers—One producer of phthalates has published new price schedules for

Coatings Materials

dibultyl, di-iso-octyl and dioctyl phthalates to take effect the first day of the new year. Tankcar, tankwagon, carlot and less carlot prices alike of dibutyl phthalate are to be upped 2c. while prices for the same quantity brackets of the other two phthalate are to be 4c. per pound firmer. Other producers of the same materials, however, have expressed no intentions of going along with these advances.

Playing havoc in the overall plasticizer market is the scarcity of phthalic anhydride created by naphthalene shortages, in turn incurred by the steel strike. This pinch in raw materials comes at a time when producers of phthalate plasticizers have just completed what could be called a spectacular expansion in end use and volume increase growth.

Fillers and Inerts

Asphalt—According to a report put out by the Bureau of Census on asphalt and tar roofing and siding products, shipments of asphalt roofing during October was 11 percent higher than in September and up 23 percent from October, 1958. Shipments of asphalt disings were 14 percent higher in October than in the previous month, but 6 percent lower for the same time period last year.

Insulate siding had shipments 12 percent lower in October than the previous month and 23 percent lower than in October, 1958. Asphalt board products shipments during October were 7 percent less than in September, but 11 percent higher than shipments in October of last year.

Natural Resins

Gums—Prices remained unchanged, demand was steady, and supplies plentiful last week. This market has not changed its tone in several months and is slated to stay that way for the balance of the year and into the first quarter of next.

Manila gum grades were even with C grade listed at 35c. to 39c., DBB at 25c. to 28c., DK dust at a nominal price of 41c., and MA soft at 20c. to 24c. per pound.

Shellac—Price schedules were steady and unchanged last week. With the holidays approaching, business was somewhat spotty, and industrial sales were said to be small, but slightly improved. Listing prices, orange lemon No. 1 grade shellac held steady at 37c. to 39c., No. 2 was listed at 34c. to 37c., and orange superfine shellac was priced at 32c. to 34c. per pound.

Naval Stores

Pine Gum—For the week ended December 5 the average price per standard barrel of commercial crude gum was reported at $23.20 as compared with $28.10 the previous week and $23.20 a year ago. The volume of gum deliveries to plants totaled 12,589 barrels as against the previous week's 14,200 and 14,900 a year ago. Content per barrel included an average 7.60 gallons of turpentine and 296.4 pounds of resin. Gum grade percentages ranged as follows: WG, 1; N, 35; M, 45; K and below, 19.

Rosin, Gum

(USDA, per 100 lbs.)

	Fri. Dec. 11	Mon. Dec. 14	Tues. Dec. 15	Wed. Dec. 16	Thurs. Dec. 17
Drums—					
N	$10.84§	...	...	...	...
WG	10.55§	...	$10.87§	...	$10.94
WW	12.22§	...	11.35	...	...
Bags—					

Tankcars (for week ended December 18)—M or better, $9.80; K or better, $10.00; K or better, $10.15; M or better, $10.15; K or better, $10.35

Sales, USDA

3,937* 366* 565* 2,079* 529*

New York

(Per 100 lbs., c.l., Friday)

WW, $13.35; WG, $13.10; N, $12.60; K-M, $12.30

Turpentine, Gum

(USDA, per gal., 7.2 lbs.)

Price	...	...	...	...	...
Sales	...	...	...	...	...

* Drums equivalent. § Average price.

Miscellaneous

Casein—Little buying has been going on in this market due to the coming holidays. Prices of Argentine casein have been slightly softer of late at 20½c. to 20¾c. per pound. The heavy demand from European markets during the summer and fall has dropped off considerably. Stocks in the Argentine are once again very heavy with new production almost finished and an estimated 14,000 tons amassed during the three producing months.

Trading in Australia has been limited due to a shortage of supplies and prices are mostly nominal. Inquiries from Japan to that source have been reported to be good.

FMC's Niagara Division Sets Up New Unit, Names 4

Niagara Chemical Division of Food Machinery & Chemical Corporation, Middleport, N. Y., has formed a new marketing research department and elected J. Lloyd Poland to manage it and Ralph Freund to be its market analyst.

Until now, Niagara's market research unit, concerned chiefly with technical development projects, has operated as part of the research and development department. Under the new set-up, marketing research will be broadened to include other departments of the company.

In the research and development department, the company has made two new personnel appointments. Dr. N. E. Krog has been named assistant to the department's director and Dr. K. P. Dorschner has been advanced to the post of supervisor of biological laboratories.

Mallinckrodt Gets Contract For 2nd Atomic Ship Core

Mallinckrodt Nuclear Corporation will produce uranium fuel for half of the second atomic core to be used in the N. S. Savannah, first United States nuclear merchant ship. The contract calls for production of 14,175 pounds of 3.9 percent enriched uranium dioxide in powder form—with a total material worth of $3 million.

Shipment will begin in early January to General Electric Company's nuclear facilities in San Jose, Calif., for further fabrication into the fuel elements that make up the reactor core.

At the same time, the St. Louis, Mo., firm reports that it has completed shipment of more than 20,000 pounds of slightly more than 4 percent enriched uranium dioxide for the complete first core. This latter material has been pelletized for fuel elements at Babcock & Wilcox Company's Lynchburg, Va., plant.

LPG's Still Fair-Haired

—Continued from page 7

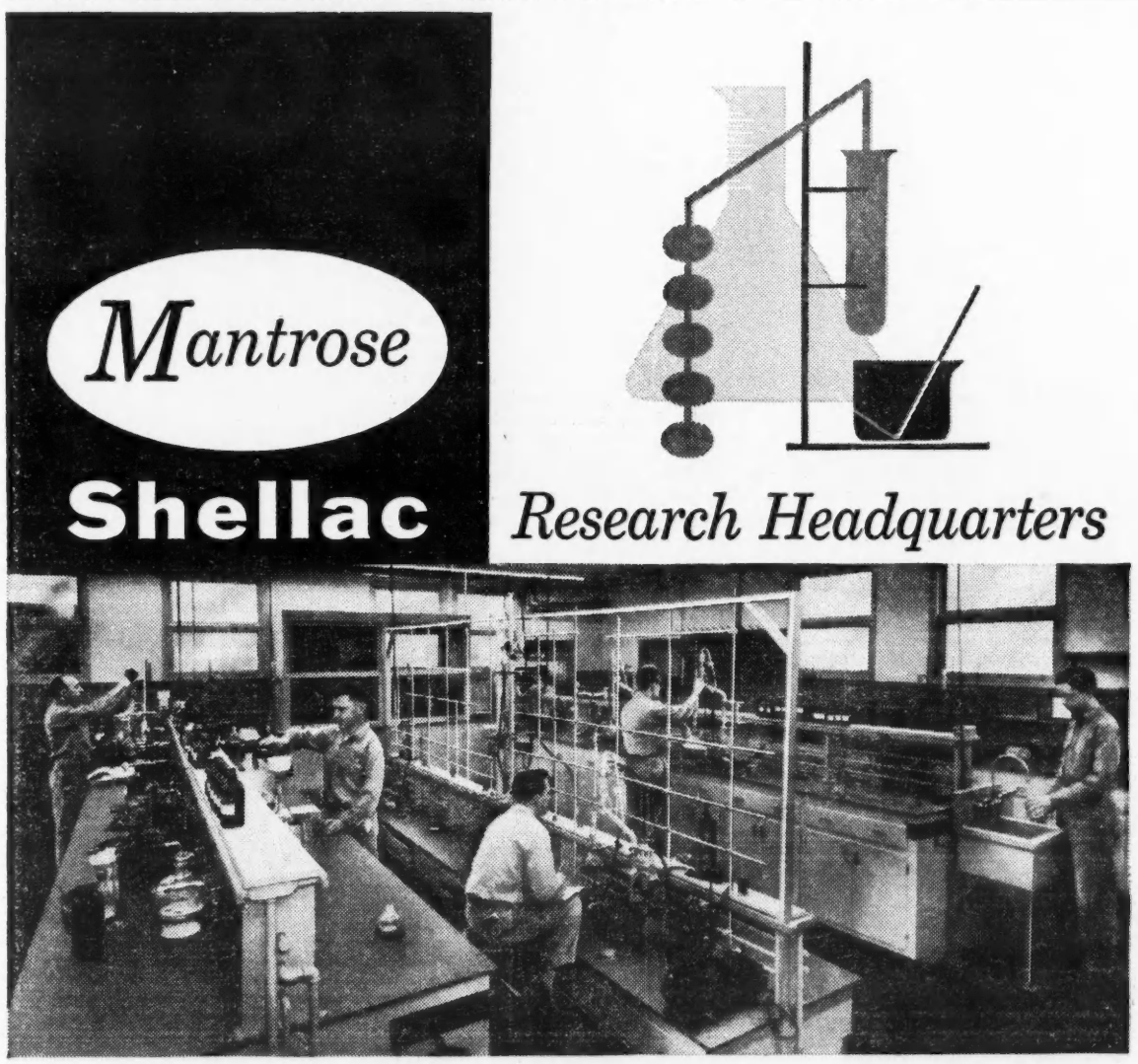
lift and tow trucks, however, continues to increase at a faster rate than any of the other motor fuel uses. Cargo truck refrigeration and heating, ready-mix concrete trucks, electric generator sets, and local delivery truck fleets continue to show substantial gains.

Sales for industrial and miscellaneous uses are expected to increase 26.5 percent to a total of 1,020,000,000 gallons, a large factor being greater refinery fuel use. Sales to gas utilities are seen rising 2.6 percent to 245 million gallons. Although the extension of natural gas pipelines has caused displacement of LPG's in some areas, the over-all effect has been to stimulate interest in LPG's as well as natural gas and create the need for additional standby plants.

Production of liquefied petroleum gas, including the mixed streams going to petrochemical use and refinery fuel, is expected to be nearly 18 percent over 1958. This increase is thought partly due to more complete coverage of many mixed streams. Eleven new plants came on stream and several others were expanded during the year. An estimated sixteen new plants are scheduled for 1960.

Expansion of transportation facilities continues at a more moderate pace than in recent years. Continued emphasis is being placed on larger capacity highway transport units, and interest in larger capacity railroad tank cars is evidenced, Phillips concludes.

Mantrose Shellac Research Headquarters



Where the world's finest natural shellacs are "custom-tailored" to industry's special requirements

Good shellac only *begins* with the top-grade seed lac that Mantrose imports. For users today require "individualized" shellacs, modified to fit exacting processing or finishing conditions.

That is why America's leading shellac users call on Mantrose research facilities to "design" *new* shellacs . . . *to build* additional advantages and controlled, predictable processing characteristics into the natural product . . . to enhance still further the unduplicated superiority of genuine shellac.

Chemists and consultants from the Mantrose Laboratories will be glad to discuss how a standard Mantrose shellac, or a "new" shellac, can better suit *your* processing requirements. There is no charge for this service.

The Mantrose Corporation *Established 1919* *Importers • Bleachers • Manufacturers*

89 PARK AVENUE, NEW YORK 16, N. Y. • MU 7-2762 • ATTLEBORO, MASSACHUSETTS

Obituaries

John McLean Hawkins

John McLean Hawkins, president of American Ferment Company, a subsidiary of Sterling Drug, Inc., New York, died December 16 in Bronxville, N.Y. He was fifty-nine years old.

Mr. Hawkins became associated with Sterling Drug in 1942 and was appointed vice-president of its then Bayer Company division in 1943. He became vice-president of American Ferment the same year, and president in 1946.

Edward R. Snyder

Edward R. Snyder, former executive vice-president of the Barrett division of Allied Chemical Corporation, New York, died December 13 in Montclair, N.J. He was seventy-four years old.

Rudolph T. Eistad, president of United States Steel Corporation's Oliver iron-ore operations in Minnesota for thirteen years, died December 15 in Duluth, Minn. He was sixty-four years old.

William H. Frost, director of the dye department of Alexander Smith & Sons Carpet Company, died December 9 in Yonkers, N.Y.

James Joseph Mooney, head of marine service of Standard Oil Company of New Jersey's refinery in Bayonne, N.J., died December 13 in Elizabeth, N.J. He was forty-five years old.

DCB Value Increasing

—Continued from page 7

rearrangement occurs. When this happens, the remaining chlorine exhibits the lower degree of reactivity typical of non-allylic halides.

1,4-dichloro-2-butene reacts with tertiary amines to produce high yields of bis-quaternary ammonium compounds. Displacement reactions with organic and inorganic salts occur readily. Potassium thiocyanate gives the corresponding dithiocyanate; silver nitrate gives the dinitrate; and sodium acetate gives the diacetate. Diethers are readily made when the chemical is treated with alcohols in strongly alkaline solution.

Reactions of these types suggest potential markets for 1,4-dichloro-2-butene and its derivatives in the rubber, petroleum, electroplating, pharmaceutical, and textile industries, duPont says.

Samples of 1,4-dichloro-2-butene can be obtained for research purposes. DCB is available in tankcar lots at 37 cents per pound, and in 55-gallon, nonreturnable drums at 39 cents per pound, f.o.b. Victoria, Tex.

DuPont, German Company

—Continued from page 3

establish the joint company. As an old, established producer of white pigments, Sachtleben's decision to become active in the titanium dioxide field is a logical step forward. We are convinced that our close cooperation with the duPont company will result in the production of high-quality pigments for the benefit of the industries using these products."

David H. Conklin, European director of duPont Company, notes:

"We are very happy to be associated with one of the most experienced German pigment producers in this joint venture. With more than 150 years' experience in the field of chemical manufacture, we believe duPont can make a substantial contribution to our partnership with Sachtleben, and we are confident that our cooperation will prove of mutual benefit to our two companies."

Sachtbelben, principally owned by Metallgesellschaft A.G., of Frankfurt, was established as a limited corporation in 1926. Its predecessor, "Lithopone und Permanentweiss-Fabrik A.G.," Schoningen, started the production of lithopone as early as 1878. The activities of the corporation at present include the operation of pyrite and barite mines and the manufacture of zinc sulfide pigments, especially lithopone.

Hooker's Chief Executive

—Continued from page 7

is a partner and founder of A. & H. Kroeger, N. Y., an industrial management firm.

Mr. Murray, serving as Hooker's chairman of the board since mid-1955, was, during the same period, chief executive officer of the company as well as president and a director of two subsidiaries, Hooker Chemicals, Ltd., and Marble-Nye Company.

He will retain the title of chairman of the board until the next scheduled directors meeting on March 9, 1960.

Bids Wanted

Acetone, ACS, 22,430 bots., Bid IFB 32-101-60, Dec. 21; **Hydrogen Peroxide,** solution USP, 43,896 bots., Bid IFB RFP 5759Q, Dec. 22, Military Medical Supply Agency, 29th St. and 3rd Ave., Brooklyn 32, N. Y.

Acids, 6810-222-9645 Hydrochloric, Technical, 1.158 min. SP Gr., Fed Spec. O-A-86 1 (June 8, 51) 112,000 lbs.; Nitric Acid Technical, 1.375 min. SP Gr., 83,500 lbs., Fed. Spec. O-A-88(1) June 8, '51; Sulfuric Acid, Technical, 93.0 percent min. 1.835 SP Gr., 70,000 lbs., Fed. Spec. O-A-115 (1) (Nov. 29, '45); Sulfuric Electrolyte, 49.5 percent to 50.5 percent SP Gr. 1.395, 60,000 lbs., Fed Spec. O-S-801A (Aug. 8, '56); Orthophosphoric Acid, Technical, 85 percent min. SP Gr. any acceptable Class A Fed. Spec. O-P-313(1) (July 25, '51), 80,000 lbs.; Orthophosphoric Acid, Technical, 85 percent min. SP Gr., 40,000 lbs., Class B Fed. Spec. O-P-313(1) (July 26, '51), Bid IFB 41-608-60-120B, Dec. 30, Directorate of Procurement and Production, Kelly AFB, Texas.

Decontaminating Agent, 203,050 lbs., 5TB (8-gal. drums) Spec. MIL-D-12468 w Amend. 1, Bid CMLMC-NY-ZC-24, date not furnished, US Army Chemical Procurement District, 290 Broadway, New York 7, N. Y.

Desiccant, activated, 30,000 lbs., Type IV, grade H, in accord. with MIL-D-3716, 5-lb. unit quantity per can, SUZ-ITEM 1.1, est. Quantity 30,000 lbs., Sub-Item 1.2 est. quantity 48,000 lbs., Bid IFB 36-6000 248, Jan. 5, Directorate, Procurement and Production, Middletown Air Material Area, Olmsted Air Force Base, Pa.

Dichloromethane, Methane Chloride, Grade B, 16,675 gals., Spec. MIL-D-6998A, Amend. 1, Bid IFB 388-484-60B, Jan. 4, Aviation Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.

Drugs, 2,700 vials Cyanocobalamin Injection USP; 672 vials Cyanocobalamin Injection USP; 384 boxes, Ascorbic Acid Injection; 3,000 tubes, Bacitracin Ointment USP; 7,200 tubes, Bacitracin Ointment USP; 288 boxes, Amobarbital Sodium Steril USP; Bid IFB M5-45-60, Jan. 5, 2,040 bots., Potassium Iodide; 190 drums, Alcohol, Bid IFB M5-45-60, Dec. 31, Marketing Division for Drugs and Chemicals, VA Supply Depot, Somerville, N.J.; 19,152 bots., Urine Sugar Test Tablets, Bid RFP 5788Q, Dec. 29; 30,000 bots., Trythomycin, for suspension oral potency 48 months, Bid RFP 5773Q, Dec. 28; 31,680 boxes, Diiodohydroxyquin compound tablets vaginal, Bid RFP 5793Q, Dec. 28, Military Medical Supply Agency, 29th and 3rd Ave., Brooklyn 32, N. Y.

Fertilizer, 55 metric tons, 44 to 46% nitrogen; 15 metric tons, Sulfate of Ammonia, 20-0-0, minimum of 20.5-21% nitrogen; 164 metric tons, Muriate of Potash, 60 to 62% of K_2O; 64 metric tons, Ground Rock Phosphate, minimum of 30% total P_2O_5 and at least 3% of available P_2O_5; 225 metric tons, Tricalcium or Fused Phosphate, 20% available P_2O_5 or higher; 106 metric tons, Triple Superphosphate, 0-46-0 or higher; either FOB vessel port of loading, C&F or CIF port of Pusan or Inchon, Korea; further details from the Korean Consulate General, Bid 489-13-215-5-90269, Dec. 29.

Gypsum, 23 metric tons, stucco grade, industry model, alabasta model etc.; **Magnesite** (Magnesia) Clinker, 50 metric tons, size of grain 6-20 mm., items are C&F, CIF Pusan and or Inchon port, Bid 489-640-899-0208-0217, Dec. 31, Heung A. Commercial Co., Ltd., 6 Second St., Nampo-Dong, Pusan, Korea.

Paints, 18,923 gals., enamel, striping and stenciling, various military specs., Bid IFB 155-1491-60B, Dec. 28; 12,360 gals., Paint antifouling, Spec. MIL-P-19451 (ships) Bid IFB 155-1488-60B, Dec. 29; 26,900 gals., Primer Coating, Spec. JAN-P-735, Bid IFB 155-1470-60B, Dec. 29; Paint, Oil, 4,414 gals., Spec. Fed TT-P-102 Amend. 2 Class A, Bid IFB 155-1502-60B, Dec. 29; 12,740 gals. Varnish, asphalt, Spec. Fed. TT-V-51A Amend. 1, Bid IFB 155-1489-60B, Dec. 28, General Stores Supply Office, 700 Robbins Ave., Philadelphia 11, Pa.; 267 gals., enamel, TT-E-487, 613 gals., TT-E-489B, 51 gals., TT-E-506C, 337 gals., TT-E-506C, 117 gals., TT-E-529, 96 gals. TT-E-543; Paint 150 lbs., TT-P-21, 291 gals., TT-P-24A, 12 gals., TT-P-25A, 92 gals., TT-P-29 415 gals., TT-P-86A, 8 gals., TT-P-51D, 415 gals., TT-P-86A, 398 gals., TT-P-102, 60 gals., TT-P-115A, 293 gals., MIL-P-698A, 169 gals., TT-A-468A, 89 gals., Turpentine, 428 gals., Thinner, 39 gals., Varnish, TT-V-119, 70 gals., Paint, roof metallic, 42 gals., Linseed Oil, 4 gals., Japan Drier, 11 gals., Remover, Bid IFB CIVENG-15-029-60-15-B, Jan. 6, US Army Engineer District, Louisville, Ky.

Gas Group to Meet

The Compressed Gas Association will hold its annual meeting January 18 to 20, 1960 at the Waldorf-Astoria hotel in New York.

ULTRAMARINE BLUES

- Prompt deliveries through nation-wide warehouses
- Complete range of types
- Experienced technical service

The Big Name in Quality Ultramarine Blues (formerly sold by American Cyanamid Company)

UNITED ULTRAMARINE & CHEMICAL COMPANY, INC.
149 Broadway, New York 6, N.Y.

Widely Recognized as a Standard of the Industry!

Sovasol 35 is an isoparaffinic solvent that is practically odorless, water-white in color, doctor sweet, and extremely color stable. It comes to you spotlessly clean in tank cars. These qualities have made Sovasol 35 a standard of the paint industry.

For further information about Sovasol 35 and Mobil's complete line of quality aliphatics, call your Mobil representative, or write to address below.

Mobil

MOBIL OIL COMPANY
A Division of Socony Mobil Oil Company, Inc.
150 East 42nd Street, New York 17, N.Y.

Oils, Fats and Waxes

Crude coconut oil closed higher due to the stronger copra market. Early in the week prices dropped fractionally, but rallied with improved demand and offers were raised 3/8 cent for prompt shipment to the Pacific coast. The New York market remained steady and unchanged. Copra was firmer with trading noted at an advance of $10 per ton. Bearish soybeans crop report weakened the oil market, causing prices to drop fractionally. This was reflected in peanut and cottonseed oils, which closed lower, while corn oil advanced slightly due to limited stocks. Cash lard was easy and lower.

The Spanish government announced last week the cancellation of official prices for olive oil exports and the necessity of obtaining export licenses. The new regulation became effective immediately. However, shipments of oil of more than 1.5 percent acidity will not be authorized by the government nor exports of oil in used drums. Shipments from Spain became firmer, advancing $1 per 100 kilos due to increased demand from Italy. The local market continued inactive and was easier. Spot stocks declined 5 cent per gallon.

Trading in tallow and greases was moderate and took place at unchanged quotations. Demand from soapers was limited and sales were reported at slightly lower level on firm bids. Export business was light and spotty.

Castor oil continued in a firm position due to the strength of imported oil. Offerings from Brazil were scarce and held at high levels from India. Offers of castor beans from Brazil were nil and only in small lots from other sources. Crude menhaden oil was unsettled and declined ¼ cent per pound. Refined fish oils were steady and unchanged. Palm oil was raised slightly on spot, reflecting higher cost from primary sources.

Linseed oil was reduced ½ cent due to lower flaxseed. Linseed meal dropped $4 per ton for December-March delivery.

Price Trends

Advanced

Candelilla wax, 1c. to 2c. per lb.
Coconut oil, Pac. coast, 3/8c. per lb.
Copra, $10 per ton.
Corn oil, crude, ½c. per lb.
Refd., ½c. per lb.
Palm oil, 1/10c. per lb.

Reduced

Cocoa butter, 1c. per lb.
Cottonseed meal, 50c. per ton
Cottonseed oil, crude, ⅛c. per lb.
Refd., ¼c. per lb.
Lard, cash, ¼c. per lb.
Linseed oil acid, ½c. per lb.
Linseed meal, $4 per ton
Linseed oil, ½c. per lb.
Menhaden oil, crude, ¼c. per lb.
Olive oil, spot, 5c. per gal.
Peanut oil, crude, ½c. per lb.
Refd., ½c. per lb.
Soybean oil, crude, ¼c. per lb.
Refd., ¼c. per lb.

Comparative Price Indexes

(100=1949 average)

Last week	Prev. week	Last month	Dec. 19 1958
123.46	123.32	122.53	117.80

For Current Prices See Page 9

Vegetable Oils

Castor—Strong tone featured this market reflecting the high cost of imported oils, combined with the difficulty of getting castor beans from Brazil. No. 1 Brazilian oil sales ranged from 17¾c. to 18c., tankcars, New York according to seller. No. 3 Brazilian was held at 17½c., same basis. Demand for domestic grades, was fair, confined to actual needs.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:

	Pounds	
	Castor Beans	Castor Oil
Last week	388.950	1,744,000
Previous week	.....	300,000
Corresponding week, 1958	.....	1,800,000
Total last year	24,958,250	93,316,000
Corresponding period, 1958	18,136,500	71,685,000

Coconut—Crude moved down to 16¾c. per pound, tankcars, Pacific coast, prompt shipment, but rallied with higher copra and sold at 17c., with light offerings held at 3/8c. more. The New York market was firm at 18¾c., tankcars, prompt delivery, with sales of bulk oil at 18c. c.i.f.

Corn—Prices were firmer, with crude oil sales reported at 11¾c. per pound, tankcars, f.o.b., mills, prompt shipment. Refined oil was advanced to 15½c., tankcars, New York delivery.

Cottonseed—Futures drifted over a narrow price range last week on the New York Produce Exchange. Market, however, was quite steady with prices closing practically unchanged for the period. Trading was light and market reflected the pre-holiday season. Cash oil demand was slow. Refined salad was easier, with lower crude oil. Refined salad was available at 12c., per pound, tankcars, New York, prompt delivery.

Trading in crude cottonseed oil was quiet and market unsettled. In the Valley, prices ranged from 8¾c. to 8⅞c., tankcars, f.o.b. mills; at 9c. to 9⅛c., southeast; 8⅝c., Lubbock and 8⅞c., Waco.

Linseed—Market was easier with flaxseed, declining ½c. per pound. Raw oil was quoted at 14c. per pound, tankcars, f.o.b. Minneapolis, December-March delivery; 14½c., April-June; 14.7c., July-September same basis and 15.11c., exwarehouse, New York.

Palm—Prices were steadier and slightly higher due to increased cost of replacements. Stocks on spot were raised to 14.40c.-15.40c. per pound, drums, as to quantity and 11.95c., for tankcars. Business was limited to actual needs.

Peanut—Crude oil continued unsettled and declined ½c. Sales were noted at 12½c. per pound, tankcars, f.o.b. mills, prompt shipment. Refined oil also was lower at 15¾c., tankcars, New York basis.

Peanut farmers voted last week to extend government marketing quotas on peanut crops for the next three years by a large margin.

The government report estimated the peanut crop at 1,602,115,000 pounds for this year compared with 1,655,800,000 pounds, November 1; 1958 production of 1,835,000,000 pounds and 10-year average 1,642,502,000 pounds. Acreage harvested totaled 1,461,000 acres against 1,523,000 in 1958 and 10 year average 1,873,000 acres. Yield per acre was indicated at 1,097 pounds compared with 1,205 last year and 10-year average, 902 pounds.

Olive—The Spanish Ministry of Commerce announced last week the cancellation of official prices of olive oil for shipment abroad, and export licenses, effective immediately. The only restrictions in effect were that sales abroad of olive oil of more than 1.5 percent acidity in drums will not be authorized nor exports of oil in used drums permitted.

The lifting of export restrictions was said to be partly responsible for improved demand for Spanish oil shipment to Italy, resulting in a firmer market. Prompt shipment was advanced to $49-$50 per 100 kilos, new drums, f.o.b. shipping point. While replacements were higher, the local market was quiet and easier. Spanish oil on spot was lower at $2.25 to $2.35 per gallon, drums, duty paid, as to quantity.

Soybean—Bearish government soybeans crop report unsettled the oil market. Trading was quiet and market declined fractionally. Crude was lower and nominal at 7⅝c. per pound, tankcars, Decatur, unrestricted for December shipment. Refined salad was easier and offered at 9.70c. per pound, tankcars, New York, prompt delivery.

The final government's estimate of the soybeans crop this year placed production at 537,895,000 bushels against 528,111,000 bushels, November 1, and 1958 output of 1,415,570,000 bushels. The 10-year (1948-57) average is 326,020,000 bushels. Acreage harvested was indicated at 22,428,000 acres compared with 23,900,000 acres last year on 1958 and 10-year aver-

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, December 18, follow:

	Sales	High	Low	Close
		Cents per Pound		
Dec.	17	10.98	10.87	Expired
March	122	11.18	11.06	11.17@11.20
May	188	11.37	11.23	11.37@11.38
July	182	11.55	11.34	11.50S
Sept.	16	11.29	11.24	11.37@11.40
Oct.	46	11.27	11.11	11.26S
March (1961)	3	11.25	11.21	11.30 Bid
May (1961)	4	11.27	11.20	11.30 Bid

Total sales and switches, 578 contracts.

FATTY ACIDS

STEARIC ACID • OLEIC ACID
HYDROGENATED FATTY ACIDS
TALLOW FATTY ACIDS
HYDROGENATED GLYCERIDES
HYDROGENATED CASTOR OIL
12 HYDROXY STEARIC ACID

HARCHEM CENTURY BRAND
HARCHEM DIVISION
WALLACE & TIERNAN, INC.
25 MAIN STREET, BELLEVILLE 9, NEW JERSEY
IN CANADA: W. C. HARDESTY CO. OF CANADA, LTD., TORONTO

OLEIC ACID
STEARIC ACID
HYDROGENATED TALLOW FATTY ACIDS

ACME HARDESTY CO.
60 East 42nd Street
New York City 17, N. Y.
MUrray Hill 2-8556
Factory: Philadelphia, Pa.

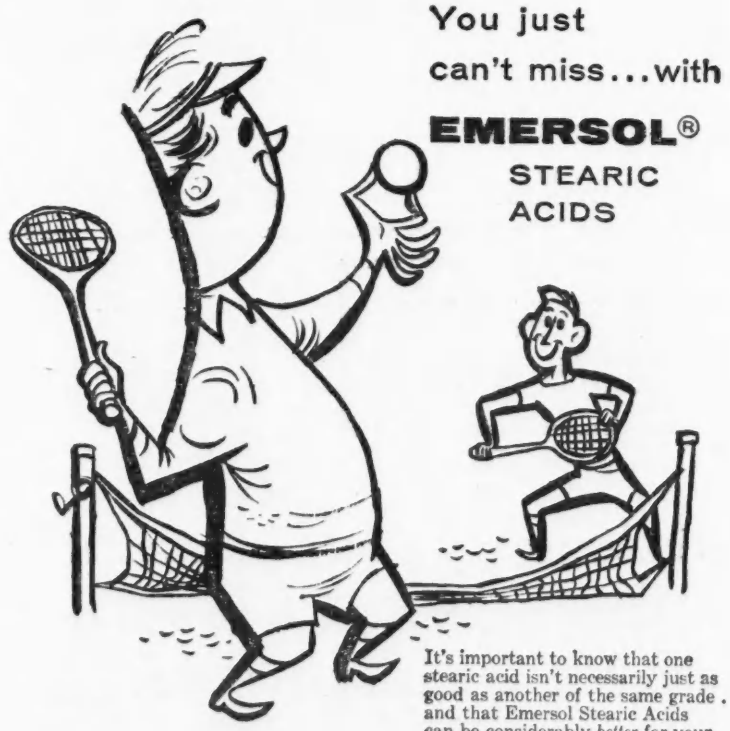
DISTILLED VEGETABLE F.A.
DISTILLED TALLOW F.A.
HYDROGENATED TALLOW GLYCERIDES.

WAXES

Importers and Refiners
CARNAUBA • OURICURY
CANDELILLA
Crude • Refined • Bleached • Flaked • Powdered
MAMARONECK REFINED BRAND
Vegetable Waxes
CERESINS — OZOKERITES
Palm Waxes — Resin Blends
Compounds and blends made to your specifications
CERITA WAXES

M. ARGÜESO & CO. INC.
441 Waverly Ave., Mamaroneck, N.Y.
Owens 8-8500 • Cable MARGUESO • Established 1908

You just can't miss...with
EMERSOL® STEARIC ACIDS



It's important to know that one stearic acid isn't necessarily just as good as another of the same grade . . . and that Emersol Stearic Acids can be considerably *better* for your company's products—without costing a cent more.

So, order from Emery the next time you buy stearic acid. Write Dept. O for 24-page Emeryfacts titled "Emersol Stearic Acids."

Emery
FATTY ACID SALES DEPT.
New York • Philadelphia • Boston
Chicago • Cleveland
Ecclestone Chemical Co., Detroit
West Coast: Vopcolene Division
5148 E. 61st Street, Los Angeles 22, Calif.
In Canada: Emery Industries (Canada) Ltd.
639 Nelson St., London, Ontario
Warehouse stocks also in Baltimore and Buffalo
Export Dept.: Carew Tower, Cincinnati 2, Ohio

Emery Industries, Inc.,
Carew Tower, Cincinnati 2, Ohio

PRICE
QUALITY
SERVICE

REFINED
TALL OIL
DISTILLED
TALL OIL
TALL OIL
FATTY ACIDS
ALL TYPES

WELCH
HOLME
& CLARK
CO., INC.

One Hudson St., N. Y. 13, N. Y.
BA 7-4465

HYDROFOL

Glycerides

For improved greases, soaps, stearates, wax specialties, and textile finishes.

Quality Checked by Gas Chromatograph

WRITE FOR DATA
Archer-Daniels-Midland
CHEMICAL PRODUCTS DIVISION
723 Investors Building, Minneapolis 2, Minn.

CARNAUBA WAX

Refined—Flaked
Specializing in Yellows & Bleached

Candelilla Esparto
Japan Wax Beeswax

WM. DIEHL & CO.
116 East 56th St., N.Y.C. 22, N.Y.
MUrray Hill 8-7960

AMERICAN MONTAN WAX

ALPCO

CONSIDER THAT
ALPCO WAX . . .
- ✓ is guaranteed to be uniform
- ✓ is free from import restrictions
- ✓ is price stabilized
- ✓ is stocked at convenient points
- ✓ is offered with technical advice

REFINED GRADES
(decolorized)
NOW
AVAILABLE

Produced in California by:
AMERICAN LIGNITE PRODUCTS COMPANY, INC.
IONE, CALIFORNIA
Sales Offices: 110 E. 42nd St.—RM 1211—New York City 17 Ione, Calif.

OPD REPRINTS
35 CENTS A COPY

Phthalocyanine Pigments • Sodium Sulfate • Optical Brighteners • Acetone • Maleic Anhydride • Lysine Monohydrochloride • DDT • Ultraviolet Absorbers • DOP and DIOP • Butadiene • Styrene • Borax • Chelating Agents • Titanium Pigment

OIL, PAINT AND DRUG REPORTER
REPRINT DEPARTMENT, 30 CHURCH STREET NEW YORK 7, N. Y.

Oils, Fats and Waxes

age of 15,498,000 acres. Yield per acre was 24 bushels against 24.3 last year and 10-year average of 21 bushels.

Tung—Trading was quiet, but the market remained steady with the firmness of overseas market. Imported oil was well held at 22¼c. per pound, tankcars, New York for prompt and later delivery. Drums were unchanged 23¾c. to 24¼c., spot as to quantity. Domestic oil was nominal at 21½c., tankcars, f.o.b. mills.

Miscellaneous

Cocoa Butter—Liberal stocks and slow demand weakened the market. Prices declined to 62c. to 67c. per pound, according to quantity.

Copra—Shipments were firmer and sales were reported up to $235. per short ton, c.i.f. Pacific coast for January arrival. Offerings continued light.

Flaxseed—The government's final estimate of the flaxseed crop this year placed production at 22,709,000 bushels, against 21,790,000, November 1 and 1958 production of 38,568,000 bushels. The 10-year average is 39,700,000 bushels. Yield per acre was indicated at 7.3 bushels compared with 10.2 last year and 10-year average of 8 bushels. Acreage harvested totaled 3,132,000 acres against 3,789,000 last year and 10-year average of 4,698,000.

Weak undertone prevailed in the flaxseed market, reflecting toppling Winnipeg futures and less pronounced declines at Minneapolis. Crushers reduced bids in the cash market 5c. a bushel to $3.55, basis Minneapolis, firm to-arrive bids lacking. Slight expansion in to-arrive bookings occurred ahead of the decline and a few spot transactions were at 1c. to 2c. premiums.

Fats and Greases

Greases—While buying interest was limited to actual needs, the market ruled on a steady basis. Choice white, 6⅜c. to 6½c. per pound, tankcars, delivered and yellow 4⅞c. to 5c., same basis, with bids generally ⅛c. lower.

Lard—Market was quiet and easier. Cash lard declined to 7¼c. per pound, drums, Chicago.

Tallow—Business continued restricted to prompt needs. Soapers obtained moderate lots at the lower level on firm bids. Bleachable fancy, 6c. to 6⅛c. per pound, tankcars, depending upon seller. Sales were reported at this level. Prime was quoted at 5¾c. to 5⅞c.; special, 5¼c. to 5⅜c.; No. 1, 4¾c. to 4⅞c. and edible, 8⅝c. to 8¾c., same basis. Export demand was light and spotty. Guaranteed fancy, 7¾c. to 7⅞c. per pound, drums, f.a.s. and 6⅝c., bulk, f.o.b.

Cake and Meal

Cottonseed Meal—Trading continued quiet. Prices were easy and slightly lower. Meal, 41 percent was quoted at $63.50 per ton sacked, Memphis; $67, Alabama; $68, Georgia and $69 Carolina, prompt shipment.

Linseed Meal—Prices were reduced sharply—$4 per ton to $70 for December-March delivery. Stocks for immediate delivery ranged from $73 to $74, depending upon seller and quantity.

Soybean Meal—Strength again prevailed in this market, especially in the Northwest where earlier lagging was experienced. Slightly better feed business and prospect for sharply curtailed production during the holiday period were strengthening influences. Continued weakness in oil was also a bullish factor in meal, complaints widespread about poor margins. Unrestricted billing quotations were 50c. a ton higher while Northwest markets were up as much as $3. Meal, 44 percent protein, was quoted $59.50 a ton, unrestricted, bulk, Decatur, for prompt shipment.

Fish Oils

Cod—Buying interest was moderate, with sales reported on the basis of 7⅛c. to 7¼c. per pound, bulk, f.o.b. Gloucester, Mass., for January shipment. Offers were not liberal and closely held. Drums on spot ranged from 8¼c. to 8⅜c., as to quantity.

Menhaden — Slackened demand for domestic and export delivery created an easier tone in this market and crude declined to 7c. per pound, tankcars, f.o.b. works. Some plants in the Carolinas have shut down for the season. Fishing was reported light and spotty. Refined grades were unchanged and steady. Light cold pressed oil was held at 10c. per pound, tankcars, New York basis.

Waxes, Vegetable

Consumer interest in vegetable waxes last week was centered in obtaining candelilla wax on spot and for shipment. Inquiry was active, but trading was affected by the scarcity of stocks here and for shipment from Mexico. Holders of supplies on spot have raised prices 1c. to 2c. per pound and are doling out small lots only to regular customers. Crude wax was held at 61c. to 62c. per pound, on spot as to seller and quantity and refined, 67c. to 68c. Demand for carnauba grades was quiet, but prices were well held for all grades on spot and shipment. No. 3 Ceara, crude, was quoted at 76c. to 78c. per pound, spot and Parnahyba, crude was 2c. higher. No. 1 yellow, Ceara was unchanged, ranging from $1.14 to $1.18 per pound, spot, depending upon quantity and delivery, with Parnahyba, 2c. higher.

Refined beeswax continued in fair request for prompt needs. All grades were unchanged and steady, reflecting the scarcity and firmness of crude grades.

Steadier tone ruled in ouricury wax. Stocks on spot were light and firmly held. Crude was quoted at 65c. to 67c. per pound and refined, 73c. to 75c., as to quantity.

Unsaturated Fats and Oils

—Continued from page 7

disease should be continued, and this policy statement does not interfere in any way with legitimate research and clinical evaluation of unsaturated fats in the diet.

"It is our responsibility, however, to point out that the public has been misled into relying prematurely on data which are still experimental, incomplete, and contradictory, and to head off false and misleading promotions based on such data."

Cholesterol, FDA explained, is a substance that is manufactured in the body and has an important function in many of the body tissues. It is also present in animal fats and oils such as butter, lard, bacon and meat fat. The blood level of cholesterol is controlled largely by synthesis in the body and is affected very little by the amount present in our foods, FDA notes.

FDA further pointed out the view of nutrition scientists that it is impracticable for a person to add enough unsaturated fats to an otherwise unchanged diet to bring about any significant change in blood cholesterol.

FDA's Statement on Policy

The FDA policy statement, based on an extensive survey of leading medical authorities, follows:

- There is much public interest and speculation about the effect of various fatty foods on blood cholesterol and the relationship between blood cholesterol levels and diseases of the heart and arteries. The general pulic has come to associate the term "cholesterol" with these diseases. A number of common food fats and oils and some other forms of fatty substances are being offered to the general public as being of value in the control or reduction of blood cholesterol levels and for the prevention or treatment of diseases of the heart or arteries.
- The role of cholesterol in heart and artery diseases has not been established. A casual relationship between blood cholesterol levels and these diseases has not been proved. The advisability of making extensive changes in the nature of the dietary fat intake of the people of this country has not been demonstrated.
- It is therefore the opinion of the Food and Drug Administration that any claim, direct or implied, in the labeling of fats and oils or other fatty substances offered to the general public that they will prevent, mitigate, or cure diseases of the heart or arteries is false or misleading, and constitutes misbranding within the meaning of the federal food, drug and cosmetic act.

For Domestic and Export
COTTONSEED MEAL AND CAKE
PEANUT MEAL-SOYABEAN MEAL

Export Codes: ABC 5th, BENTLEY'S
JUNIOR PEERLESS

Cable Address: BRODE
Phones: L. D. 271 — Local 38-2544
Teletype No. ME-260

THE BRODE CORPORATION
P. O. Box 700 1012 Falls Building
MEMPHIS, TENNESSEE

PUMPS—VACUUM—115 CFM Beach Russ RP 100 w/5 HP motor-vee drive-Dorr Oliver 8x8 w/15 HP motor.

AUTOCLAVES—S/S 2 qt.-35 gal. jacketed-100 gal. jack/ag.-150 gal. jack./ag.

PACKAGING MACHINERY—Triangle (6 oz. to 5#)-Triangle auger packer 1# to 5#-St. Regis 105FV-Bag Packer-Pneumatic Scale Auto. Capper.

MILLS—HAMMER—00 Sturtevant 10 HP. X Gruendler 20 HP-3W Mikro 30 HP-24x20 Jeffrey 40 HP-AKBX Wms. 100 HP.

MILLS—PEBBLE—15-½ Gal jar-100 Gal. 34x38-110 Gal. 36x36-120 Gal. 36x42-211 Gal. 4'x5'-597 Gal. 6'x5',-1000 Gal. 6'x8' porcelain lined w/motors.

SCREENS—20" Coombs Gyratory-12"x72" Lo-Veyor (S S)-20"x84" Rotex triple 40x84 Rotex double-3x5 & 3x10 Tyler double.

LAWLER COMPANY
LAWLER PLACE METUCHEN, N. J.
LIBERTY 9-0245

FEATURED ITEMS

Fletcher 30" Susp. S.S. 10/5 H.P. Centrifugal, Vaportite.
Fletcher 40" Susp. Steel Centrifugal.
Oliver 5'3" x 3' Stainless Precoat Filters.
2350 gal. 304 SS Tank.
Nooter 750 gal. Steel Reactor 300 PSI.
8' x 96' P&S Conveyor Dryer Stainless.
Link Belt 502-16 Roto-Louvre Dryer.
Vulcan 9' x 100' Rotary Kiln.
8' x 80' Rotary Dryer 316 SS.
5' x 45' Rotary Dryer.
Mosser 4' x 47' Rotary Dryers.
Louisville 6' x 50' Steam Tube Dryer.
Raymond #5448 High Side Mill.
Micro 2TH Pulverizer.
Condensers-Heat Exchangers 100 to 5000 sq. ft. S.S., Steel, Adm.
Pressure Vessels 300 to 4500 gal.
Towers and Columns 3' to 10' Dia.

Write for Catalogues

HEAT & POWER CO., Inc.
PROCESS EQUIPMENT DIV.
60 East 42nd Street, New York 17, N.Y.
310 Thompson Bldg., Tulsa 3, Okla.

BRILL FOR VALUES

VISIT US AT OUR NEW OFFICES AND WAREHOUSE
35 JABEZ STREET, NEWARK 5, N. J.
MARKET 3-7420
Adjacent to U.S. Highway 1 and the Newark Airport

SPECIALS

11—Rotary Dryers: 8' x 87', 7' x 80', 7' x 55', 6' x 60', 6' x 50', 4' x 40', 4' x 30', 34" x 30'.
2—Allis Chalmers 8' x 100' Rotary Kilns.
2—Louisville 8' x 50' S.S. Rotary Dryers.
1—Louisville 4'6" x 40' Aluminum Rotary Steam Tube Dryer.
1—Louisville 54" x 35', Monel Rotary Steam Tube Dryer.
2—Link Belt 6'4" x 24' S.S. Roto Louvre Dryers.
1—Oliver 6' dia. Horizontal Filter, 316 S.S.
1—Sharples C-27 Super-D-Hydrator 316 S.S.
1—Niagara #370-38 Filter, 370 sq. ft., 304 S.S.
1—Buflovak Monel Evaporator: 550 sq. ft.
2—Struthers Wells 2000 gals. 316 S.S. jacketed, agitated Reactors.
1—Unused Pfaudler 200 gal. 316 S.S. jacketed agitated Reactor with 120 sq. ft. Condenser and packed column.
1—#5 Mikro Atomizer, S.S.
3—Swenson Walker Crystallizers 30' long.
1—Stokes R4 Preform Press.
2—#49 Vallez Rotating Pressure Filters, 738 sq. ft.
1—National 8' x 80', 304 S.S. Apron Conveyor Dryer.

REACTORS — EVAPS — CONDS — TANKS

1—1400 gal. Blaw-Knox steel jktd. agtd. Reactor.
1—7500 gal. 316 S.S. Vert. Storage Tank 7' x 25', 50 psi.
1—750 gal. nickel clad Mixing Tank, 125# internal with nickel coils.
1—4000 gal. Haveg 60 Vertical Tank 8' x 12'.
1—12,000 gal. horiz. steel Tank 7'6" x 36', 200 psi.
8—Stainless Heat Exchangers: 1220, 942, 536, 396, 315, 250, 157 sq. ft.
1—24" dia. x 35', 304 S.S. Bubble Cap Column.
1—30" dia. x 20', 304 S.S. Bubble Cap Column.

CENTRIFUGES

1—Bird 18" x 28", 316 S.S. Solid Bowl, Cont.
1—Bird 18" x 28", steel, Solid Bowl, NEW.
1—Bird 36" x 50" 347 S.S. Solid Bowl Continuous Centrifuge.
2—Sharples PY14, PN14, Super-D-Canters, 316 S.S.
1—Bird 40" suspended, 347 S.S., perf. basket.
2—Sharples #16, 304 S.S., 3 HP motor.

FILTERS

1—Oliver 3' x 6' Steel Rotary Vac. Precoat Filter.
1—Oliver 5'3" x 8' Steel Rot. Vac. vapor-tite housing.
1—Sparkler 33S28 Filter 150 sq. ft., 304 S.S.
1—Niagara 36H110 horiz. Filter 110 sq. ft. 304 S.S.
2—#10 Sweetland, 27 leaves, 4" centers, 250 sq. ft.

DRYERS

3—Buflovak Vac. shelf, 20—60" x 80" shelves.
1—Devine Vac. Shelf, 10—40" x 43" shelves.
2—Devine 5' x 12', 4' x 9' Atmospheric Single Drum.
1—Buflovak 3' x 20' Rotary Vacuum, 316 S.S. Unused.
2—Louisville Rotary Steam Tube, 6' x 25', 6' x 50'.
1—Traylor 30" x 18' S.S. Rotary Dryer.

MIXERS

1—#12 Sturtevant 304 S.S. Rotary Mixer, 450 cu. ft.
1—Readco 200 gal. S.S. jacketed, double arm.
1—Baker Perkins #16TRM 150 gal. jktd. sigma blades, Vacuum, 60 HP.
1—Baker Perkins #15USE S.S. jacketed, dispersion blades, 75 HP.
5—Day "Cincinnatus" double arm, 250 & 100 gal.
2—1500# Powder Mixers, 7-½ HP XP motors.
3—Steel jktd. Powder Mixers; 225, 350 cu ft.

MISCELLANEOUS

8—Stokes DD2, DDS2, T, "R", RD-3, "F" Tablet Presses.
2—Robinson Sifters, 40" x 84", Stainless.
3—Robinson Gyratory Sifters 30" x 104", triple deck.
25—Chlorimet, Durimet, and Duriron Centrifugal Pumps 1½" to 6".

Partial List of Values — Send for News Flash!

TEXAS OFFICE: 4101 San Jacinto Street, Houston 4, Texas — Tel.: JAckson 6-1351

BRILL EQUIPMENT COMPANY
35-65 JABEZ ST., NEWARK 5, N.J. Tel.: MArket 3-7420

Seasons Greetings

1—Turbo Agitator, 100 r.p.m., 10 h.p. motor.
1—American 36x84x42" jack. Sterilizer.
1—Roots 14x21 Pos. Blower, 50 h.p. motor.
1—Lydon 32 sq. ft. Atmos. Tray Dryer.
2—Gump #41 Vibrox Bbl. & Drum Packers.
1—#2 Sweetland Filter, 17 leaves on 2" centers.
3—Patterson 30 & 36" porc. lined Pebble Mills.
1—Fitzpatrick Model D Comminuting Machine.
1—Williams Size B, Type AK Hammer Mill.
2—Jeffrey 24x18", Type A2 Hammer Mills.
2—Sturtevant #0-18" "Open Door" Hammer Mills.
1—Wolf 200 cu. ft. Dry Blender, 25 h.p. motor.
1—Kinney DVD 8810 100 cu. ft. Vacuum Pump.
1—Beach Russ Type RP, Class W, 100 cu. ft. Vac. Pump.
1—Kux #74—50 ton Tablet Mch., varidrive.
1—Kux #82—150 ton Tablet Mch., varidrive.
1—Colton #2B Tablet Machine, ½ h.p. motor.
1—Stokes "F" Tablet Machine, vari-drive.
1—Kent 12x30" watercooled Roller Mill.
1—Tolhurst 30" Extractor, all stainless steel.
1—Robinson 30x60" stainless steel Sifter.

WHAT DO YOU HAVE FOR SALE?

BILL WOLF, Inc.
2708 Carol Road Union, N.J.
MUrdock 6-8883

2—OLIVER PRESS, PRECOAT FILTERS, 5'3" x 3'—Type 316 S.S.
3—RIBBON BLENDERS, 2500 gallons Roller bearings, stuffing boxes.
3—AUTOCLAVES, S.S., 50 gal. 2,000 lb. 3½ gal. 2,000 lb., 2 gal. 5,000 lb.
1—REACTOR, S.S. 1,200 gal.
1—DRUM DRYER, Procter & Schwartz.
2—COLLOID MILLS, 5 HP EX-PR.
1—#4 MICRO PULVERIZER.

Machinecraft Corporation
800 WILSON AVE., NEWARK 5, N.J.
MI 2-7634

WIRE US COLLECT!

2-WILLIAMS HAMMERMILLS
1-Model 5 Shredder Grinder. 200 HP Motor and General Electric Compensating Starter.
1-Model 40 Super. 200 HP Explosion Proof, Motor and General Electric Compensating Starter.
PRICED TO SELL-IN OUR STOCK

ME MACHINERY AND EQUIPMENT CO.
123 Townsend St. - San Francisco 7, Calif.

LIQUIDATION

TITANIUM DIOXIDE PLANT

BALTIMORE, MD.

CENT. - FILTERS - EVAPS. - CRYSTAL

1—Bird 32" x 50" Cont. Cent. 316 S.S.
4—Sharples C20 Super-D-Hydrators. 316 S.S.
1—Sharples PN14 Super-D-Canters. 316 S.S.
1—AT&M 26" susp. Cent., perf. bskt. 316 S.S.
1—Oliver 8' x 8' Precoat rubber covered Rotary Vacuum Filters.
5—Sperry 36" plate & frame Filters, rubber covered, and wood.
5—8' dia. x 24' rubber lined Crystallizers.

PULVERIZERS AND MILLS

2—Abbe 5' x 16' brick lined Mills.
2—30" dia. Stainless Steel Micronizers complete with Hoppers, Conveyors, etc.

STEEL TANKS

6—2000 to 5200 gal. with Turbo Agitators.
15—Storage Tanks: 3800; 6000; 9000; 10,000; 15,000; 47,000 gals.

KILNS AND DRYERS

1—Traylor 11' x 155' Rotary Kiln, ⅞" shell.
1—Renn 6' x 60' Rotary Kiln, ⅝" shell.

RUBBER LINED TANKS

5—8500 gal. Vertical Storage 8' 6" x 16' x 8' cone.
1—13000 gal. Horizontal Storage 8' x 35'.

MISCELLANEOUS

7—Dorr Thickeners: 16' dia. with Tanks.
1—Bemis 50# Bag Packer with Sewing Machine, Conveyor and Flattener.
58—LaBour, Durco, Worthite, Duriron and Stainless Steel Centrifugal Pumps 2" to 6" with motors.

PARTIAL LIST OF VALUES • SEND FOR CIRCULAR

Representatives on Premises, 2701 Broening Highway, Baltimore, Md.
Telephone: Medford 3-2911

BRILL EQUIPMENT COMPANY
35-65 JABEZ STREET, NEWARK 5, N. J.
Telephone: MArket 3-7420

SEASONS GREETINGS

1—Patterson 6' x 8' porcelain pebble mill, 50 HP.

2—Patterson 8' x 10' buhrstone pebble mills.

1—Crosley 6'8" x 7' buhrstone pebble mill, 20 HP.

1—Porter 6' x 5' buhrstone pebble mill, 15 HP.

1—Abbe #2B 5' x 6' buhrstone pebble mill, 20 HP.

1—Kennedy 4' x 8' ball or rod mill, 50 HP.

1—Ross 6" x 14" 3-roll hi-speed mill, 5 HP.

1—2500 gal., T316 SS pressure tank, 70# WP, 7' dia. x 7' high, ¼" shell & dished heads. Lightnin' 3 HP prop. agitator.

6—2600 gal. T316 SS vert. tanks, 7' dia. x 8' high, dished top, flat bottom, ¼" shell, 5 HP Paddle agit. & int. coils—19# W.P.

1—J. H. Day 38 cu. ft. jktd. ribbon mixer, T316 SS.

1—Stuttevant #9 rotary blender, 150 cu. ft., UNUSED.

1—Sprout-Waldron 325 cu. ft. ribbon mixer, UNUSED.

4—Stokes tablet presses, rotary or single punch: T, R, DDS-2, RD-4.

2—Kux #25 rotary tablet presses, 25 punch.

1—Baker Perkins #16-JYEM2, 150 gal., sigma blade jktd. mixer, 1953.

68—Baker Perkins #17, 200 gal. dbl. arm jktd. mixers.

2—96" dia. Vulcan T316 SS bubble cap columns, 30 trays on 12" centers, 272 caps per tray.

5—A.T.&M. 40" T304 SS Suspended centrifugals, 40 HP motors. (Solid or perf. basket.)

1—Bird 40" susp. cent., steel solid basket.

23—Sharples #AS-16 Super centrifugals, Inconel bowls & covers, 3 HP TEFC motors.

2—Buflovak 42" x 120" double drum dryers, ASME 125# drums.

2—Graver 750 gal. T304 SS Kettles, ASME, 10 HP XP turbine agit.

1—1300 gal. T304 SS jacketed kettle, 5 HP XP agit.

2—4' dia. spray dryers, T304 SS, pilot size, elec.

2—Mikro #3W pulverizers, UNUSED.

1—Niagara #510-28 filter, 510 sq. ft., T316 SS.

1—Alco 110 sq. ft. vertical leaf filter, T316 SS.

2—Oliver 5'3" dia. x 3' face rotary vac. filter, precoat, T316 SS. ASME 30# pressure housing.

1—Oliver 5'3" dia. x 8' face rotary Vacuum filter—UNUSED. Steel construction.

75—T316 SS heat exchangers & condensers: 2000 sq. ft. down to 30 sq. ft.—All sizes.

1—17,650 gal. T316 SS tank, 9' dia. x 36' long, ¼" shell, ⅜" dished heads, internal coil.

PERRY EQUIPMENT CORPORATION
1407 N. SIXTH ST., PHILADELPHIA 22, PA.
Phone: POplar 3-3505

Holiday Greetings

from the ENTIRE STAFF of the
FIRST MACHINERY CORP. and
the FALCON MANUFACTURING DIVISION

EQUIPMENT STILL ON LOCATION WHERE ORIGINALLY INSTALLED CAN BE PURCHASED FOR DIRECT SHIPMENT AT TERRIFIC SAVINGS

b-e-c-a-u-s-e

These units are NOT to be shipped into our New York shops and then reshipped to destination. You save such costs as rigging, double handling, freight charges, etc.

NEW YORK STATE
(Outside of New York City)

Bowen Stainless Steel Laboratory Spray Dryer-Complete.
Robinson Size 17 Blender; 66" x 14'; 330 cu. ft. Center Disch.
J. H. Day Jacketed Mild Steel Double Ribbon Mixer; 4' x 8'.
Acme Stainless Steel Concentrator or Dryer; Continuous Type consisting of 4 Units 24" x 10' mounted horizontally; 20 HP.
Rotary Dryer in Monel; 4" Diameter by 30' Long; complete.
Jacketed Rotary Dryer or Roaster 4' x 12'3"; Monel shaft-blades.
Bucket Elevator with Stainless Steel material contact parts
Rubber Lined Mixing Tanks, Crystallizers, Evaporators to 800 Gal.
Special Lot of CHEMICAL PUMPS; Duramet, Duriron, Olivite etc.
Oliver Pressure Precoat Rotary Vacuum Filters; 8' x 8'-8' x 10'.
Rotary Cooler 3' x 15' with Feeder and accessories.
6 Southwark Hydraulic Presses; 36" x 36" Platens; 14" Ram.

NEW JERSEY

Feinc Stainless Steel Rotary Filter 5' x 6'; string type.
Patterson 1000 Gal. Dissolver; 84" x 48"; 20 HP Unipower.
Stainless Steel Rotary Dryer 4' x 20' with Oil Burner etc.
Bird Young Rotary Vacuum Filter 4' x 4' with stainless leaves.
Stainless Lined Heavy Duty Tanks; 11,000 Gal. 10' x 18'7"
Stainless Steel 7000 Gal. Horizontal Tanks; 6' x 34'.
Gehnrich Truck Dryer; 12' x 24' x 7'6"; with 24 Trucks-Trays etc.
Shriver 42" x 42" Filter Presses; 4 eyed; closed delivery.
Consolidated Capem Automatic Capper Model C4F complete.

OHIO

Fatty Acid, Lurgi Type Distillation System including Ni-Resist Still Pots, Stainless Heat Exchanger, Vapor and Barometric Condensors, Receivers, Cooling Tanks etc.
International Porc. Lined Pebble Mills 8' x 8'; 50 HP Gear Motor.
Abbe Porc. Lined Pebble Mills; 30" x 30"; 30" x 42"; 37" x 48".

ALABAMA

Swenson Quadruple Effect Long Tube Evaporator of the Vertical Film Type; 5 bodies.

INDIANA

NEW Unused F-B. Two Roll Rubber or Plastic Mills 14" x 30" with or without Uni-Drives.

CALIFORNIA

Steel Reaction Kettle 1500 Gal; Jacketed; 6' x 5'2".
Louisville Stainless Steel Dryer 30" x 25' complete.
Glass Lined Agitated Tank; 6' x 7' with 3 HP XPL motor.
Jacketed Steel Ball Mill; 5' x 2'6".
Abbe 6' x 6' Buhrstone Lined Pebble Mill; 25 HP.

ONTARIO, CANADA

Stokes Impregnators (2 Tanks each 62" x 6') Model 36-48 complete.

WEST VIRGINIA

4 Struthers Wells Type 316 Stainless Steel Jacketed, Agitated Reactors; 6' x 10' x 14' Overall.

VIRGINIA

Oliver Pressure Precoat Rotary Vacuum Filters 5'3" x 8' STAINLESS.
Oliver Pressure Precoat Rotary Vacuum Filters 5'3" x 3' Steel.

RHODE ISLAND

Type 316 Stainless Steel 250 Gal. Crystallizer; 85" x 24" with Anchor Type Agitator; Bolted head; 24" Manhole.
Patterson Kelly Twin Shell Stainless Steel Blender; 150 cu. ft. Motorized 10 HP.
Pfaudler Thimble Condenser; Glass Lined; Double Jacketed; 26 sq. ft.
International Porc. Lined Pebble Mill; 5' x 6'; 15 HP Motor.
Stainless Steel Cyclone Collector; 6' x 7'.
J. P. Devine Lab. Vacuum Dryer Model "O"; 20" Dia x 3' long.
Shriver Aluminum Filter Press; 24" x 24"; 24 Chamber; 4 eye; closed del.
Multi Pass Stainless Clad Dryer; Four 10' Sections; 12" Jktd. Screw Conveyor.
Pfaudler Glass Lined 150 Gal. Evaporating Dishes; 60" x 24".

MASSACHUSETTS

Blaw Knox Tumbling Cone Type Blender; 300 Cu. Ft.; 9'6" x 45"; complete.
Abbe Steel Ball Mills; 42" x 32"; 60" x 48".

Send for FIRST FACTS containing Complete Inventory of Equipment in our Brooklyn Warehouse Stock . . .

Now Is the Time to Sell YOUR Surplus Equipment Why Not Send Us Your List With Full Details

FIRST MACHINERY CORP.
209-289 TENTH STREET, BROOKLYN 15, N. Y.
PARKING ON THE PREMISES
PHONE: STerling 8-4672

EQUIPMENT
for CHEMICAL AND ALLIED INDUSTRIES

2—Sweco 48" SS separators, Model D-2D-8.

1—Tolhurst center slung 40" rubber covered centrifuge, perforate basket, with motor.

1—Tolhurst SS 20" suspended type centrifuge perforate basket.

1—AT&M SS 18" suspended type centrifuge imperforate basket.

1—AT&M 48" SS suspended type centrifuge imperforate basket.

1—Baker Perkins Size 6, SS, 2¼ gal. double arm jacketed vacuum mixer, complete.

1—Baker Perkins Size 16 Type UUEM, 150 gal. double arm jacketed dispersion mixer with 100 HP motor.

1—Glen 340 qt. mixer.

12—Robinson SS horizontal ribbon blender, 255 cu. ft.

1—Patterson sigma blade SS jacketed vacuum mixer, 500 gal.

1—Sprout Waldron Model 501-D pelleter with SS contact parts.

2—Sturtevant #7 SS dust type rotary batch blenders, NEW.

1—Readco jacketed 1000# ribbon blender.

1—Pfaudler Series R 500 gal. glass lined jacketed reactor, complete with agitator and drive.

1—Pfaudler Series ELL 500 gal. jacketed reactor, complete with agitator and drive.

3—Pfaudler 200 gal. glass lined jacketed reactor with impeller type agitators and drives.

2—3000 gallon stainless steel vertical storage tanks.

4—Stokes Model 138J-20 single door vacuum shelf dryers, 20 shelves.

1—Stokes SS jacketed rotary vacuum dryer, 2'x6'.

1—Buflovak stainless steel jacketed rotary vacuum dryer, 3'x15'.

1—Stokes Model 59DS rotary vacuum dryer, 5'x30'.

2—Louisville stainless steel rotary dryers, 8'x50'.

1—Shriver cast iron P & F 36"x 36" closed delivery 4 eye filter press, 60 chambers.

1—Niagara stainless steel filter, Model 510-28.

1—Sparkler stainless steel filter, Model 14-D-4.

1—Swenson type 316 SS vacuum crystallizer, 3'6"x12'.

1—Swenson type 316 SS vacuum crystallizer, 2'x12'.

15—Davis Engineers heat exchangers, 145 sq. ft., NEW.

2—Badger type 316 SS condensers 500 and 600 sq. ft.

1—Downington SS heat exchanger, 750 sq. ft.

4—Package steam generators, 50, 80, 300 and 500 HP.

1—Process Engineers SS jacketed kettle, 1500 gal, 140# working pressure jacket, 150# working pressure shell.

R. GELB & SONS, INC.
UNION, NEW JERSEY — Est. 1886 — MUrdock 6-4900

SAVE ON GOOD USED MACHINERY

CENTRIFUGALS—12", 30", 40" & 48".
CENTRIFUGES—Sharples #5 Stainless. Also #6.
DRYERS—Allright Nell 4' x 9' Atmos. Drum Dryer. Also Rotary Dryers. Buffalo Vac Drum Dryer 24" x 20" Devine 8 shelf Vac Dryer 38" x 42".
FILLERS—Powder & Liquid. Also Labelers.
FILTERS—Vallez type 49, with 41 Stainless covered leaves. #2 Sweetland 12 Stainless covered leaves. Ertel 6" & 10" Disc type.
FILTER PRESSES—6" to 36" Iron & Wood.
KETTLES—Stainless Jack. 20 to 500 gals. Dopp 350 gal. Cast Iron Jack. Vacuum. Devine Impreg. Units 30" & 36" dia. Steel, Alum & Copper 5 to 2,000 gals.
MILLS—Raymond #00 Pulverizer 30 HP complete. Also #0000. Mikro Pulverizer #4, 2S1, 2TH, 1SH, Hammer Mills & Pulverizers 3 to 50 HP. Williams #BB, #3 & #2XX Hammer Mills. Ball & Jewell #2 Rotary Cutters. Spr. Wald. Stainless Spike Crusher. Pebble, Jar & Ball Mills, Lab. to 6' x 8'. 3 Roll, 9" x 32", 12" x 30", 16" x 40" Lehmann 4 Roll W. C. 12" x 36" Steel
MIXERS—Baker Perkins 100 gal. Jack. Day Imperial 75 & 150 gal. Change Can Mixers 8, 15 & 40. Day Jumbo 700 gal. horiz. Mixer. Blystone 3000# horiz. spiral Mixer. Sturtev. 1 ton Drum Blender 10 HP. Day 1000# horiz. Dry Spiral Mixer. Dry Spiral Mixers 50 to 3000#. Lancaster 6' dia 25 HP & #1, 3 HP.
PUMPS—Vacuum 10 to 500 CFM. Gould 75 HP Centrifugal 250 PSI.
SIFTERS—Day, Robinson etc.
SOAP MACHINERY—Toilet, Laundry, etc.
TABLET MACHINES—Stokes Rotary BB2, RDS3 & RD3. Single punch to 3".
TANKS—Stainless, GI. Lined, Steel.
MISC.—Boilers Gas & Oil. Conveyors.

Partial Listings — Write for Bulletins

STEIN EQUIP'T. CO.
107 8th St., Brooklyn 15, New York
STerling 8-1944

EQUIPONOMICS

HOMOGENIZER — Manton Gaulin, S.S Model 500E, 500 GPH, 5000 PSI.

OLIVER VACUUM FILTER—S.S. 316. 3' x 6' Complete (1954).
CENTRIFUGES—Tolhurst 26" Monel, Susp;
FILTER PRESS—Shriver 36" x 36"—34-1½" Rubber Covered Frames.
HARDINGE Conical Ball Mill, 4½' x 16".
SIFTERS—Rotex 2 deck, 40" x 60"; 5 deck, 40" x 120"; 20" x 48", 2 Deck.
EVAPORATOR—Single effect, S.S. VRC, 250 sq. ft., Blaw Knox 1953. Complete.
BLENDERS—400#, 1250#, 3000#.
KETTLE—S.S. jack. 900 gal. ASME 125 PSI.
HEAT EXCHANGER—S.S. 500 sq. ft., single pass.
3 H.P. S.S. HOMO MIXER XP.

PROCESS PLANTS SERVICE, INC.
287 Central Ave., Clark, N.J. Tel. FUlton 1-1103-4

A SELL-OUT BEFORE MOVING

4—Baker Perkins & W & P 200 gal. Jktd., sigma blade Shredders—$1650.00 ea.
2—Ball & Jewell #2 Cutters with 75 H.P. motors—$2750.00 ea.
4—Link-Belt Vibrating Screens 4' x 8' — $1050.00 ea.
1—Jeffrey Vibrating Conveyor.
2—30" Sperry Filters, closed del., 3-eye, 39-plates, 40-frames—$1950.00 ea.
1—42" Sperry Filter 40-plates, 41-frames, hyd. closing, open del.—$2500.
9—Blackburn Smith Pressure Leaf Filters with S.S. Leaves.
1—International Ball Mill, porcelain lined, 48" x 60", 15 H.P. Unibrake Motor, ½-drums balls. Like new—$3200.
1—Schutz-O'Neill Pulverizer 22", Style D.
1—Sparkler Filter 18" dia., 7-plates, 316 Stainless-steam jacketed.
1—Sparkler Filter 33-S-28 with Scavenger Plate, steam jacketed, and extra plates.
1—2 qt. Sigma Blade S.S. Mixer.
1—250 gal. Kettle, nickel jacket, 100#.
2—Axial Flow Fans with 7-½ H.P. motors —$750.00 ea.
1—430 S.S. Tank 3000 gal. vert. ⅜ plate, with 2 pc. cover.
2—Vacuum Pumps, Gardner-Denver, 5" bore 4" stroke, with 7-½ H.P. motors.
1—#316 S.S. Reactor 265 gal. jkt.
2—Twin Screw Mixers 120 gal. jkt.
2—Aetna Water Stills 20 gph, stainless steel —new.

We have many other items too numerous to mention.
Advise us as to your requirements.

H. LOEB & SON :-: 4643 LANCASTER AVE., PHILADELPHIA 31, PA.

BEST BUY

BRAND NEW PFAUDLER

Glass Lined Pipe, Valves, Tees, and Ells and Reducers. Large quantity in stock. Send for complete list.

LESS THAN ½ OF NEW

ME MACHINERY AND EQUIPMENT CO.
123 Townsend St. · San Francisco 7, Calif.

SPECIALS

Pebble Mills: Patterson D 3 x 4' porc.
Disintegraters: Rietz RD18-P, steel, 75 hp.
Mixer: Baker-Perkins size 17, 200 gal.
Percolators: Pfaudler, stainless, 54 x 42"
Mills: Fitzpatrick model D, st., jktd.
Evaporator: Buflovak sgl. eff. st.st. 94 sq. ft.
Dryer: Porter 2 x 4' vac. drum, st. st.
Centrifugal: Tolhurst 26" rubber, 2-speed.
Mix-Mullers: Simpson Lab., Porto, #00.
Dewaterers: Davenport model 3A, 3 hp.
Centrifugal: Tolhurst 20" type 316 st. st.

Write us or call Seeley 8-1431
Send us a list of your idle machines.

LOEB EQUIPMENT SUPPLY CO.
814 W. Superior St. Chicago 22, Ill.

BUY with Confidence

SERVICE - DEPENDABILITY - DIVERSITY

PRIME MACHINERY

2—Pfaudler glass lined jacketed and agitated reactors 500, 20 gallons.
4—Pebble mills 250, 100, 50, 15 gallons.
4—Rotex screens 20" x 48", 40" x 120", single and double decks.
4—Stokes tablet presses models F, T, R, RD-3.
1—Tolhurst 48" centrifuge, stainless steel perforated basket.
3—Sparkler 33-S- 17 rubber filters.
1—Allis Chalmers gyratory box sifter 30" x 30".
1—Hersey steel hot air rotary dryer 1½' x 16'.
3—Mikro pulverizers, Bantam, 2-TH, 4-TH.
1—Sparkler stainless steel filter model 18-S-23.
2—J H Day 14" x 30"—3 roll high speed mills.
1—Stokes vacuum shelf dryer model 138-B.
1—International 10 cu ft stainless steel conical blender.
2—Labour stainless steel centrifugal pumps 6" x 4" with 15 HP motors.

Write or Phone Your Inquiries

CP chemical & process machinery corp.
52 Ninth St.
Brooklyn 15, N.Y.
HYacinth 9-7200

Business Wants and Offers

RATES PER INSERTION—PAYABLE IN ADVANCE (Not Subject to Agency Commission)

ALL CLASSIFIED ADVERTISEMENTS—$6.00, thirty-six words or less: $1.00 for each additional six words or fraction.

NO DISPLAY—First two words printed in bold face type.

COPY DEADLINE—Wednesday Noon Preceding Date of Publication

Send replies to ads with box numbers to
OIL, PAINT AND DRUG REPORTER, 30 *Church St., New York 7, N. Y.*

EQUIPMENT OFFERED

For Sale: 1,013 sq. ft. Double Effect Stainless Evaporator; Three Stainless Steel Single Effect Evaporators, 700 sq. ft., 261 sq. ft., 67 sq. ft.; 1,500 gal. and 1,250 gal. vertical stainless vacuum tanks with 140 sq. ft. of coils each; 8,000-1,800-1,250 gal. vertical stainless tanks; (2) 7,750 gal. and (5) 4,650 gal. phenolic lined horizontal storage tanks; 40" and 26" Tolhurst suspended perforated Centrifuges; 42" x 120", 42" x 90", 32" x 90", 32" x 72" Double Drum Dryers. Best Equipment Co., 1737 W. Howard St., Chicago 26, Ill. AMbassador 2-1452.

FACILITIES OFFERED

Chemists, Scientists, opportunity to develop new products, processes on your own. Have laboratories, equipment, buildings. Available week ends, confidential. HUmboldt 3-0488. OPD 893.

MATERIALS OFFERED

3,000 Gallons, Refined Fusel Oil, 40 cubic ft. Amberlite IR-4B 50,000 lbs., synthetic Camphor tech., 1,500 lbs. Sodium Alginate N.F. Industrial By-Products & Surplus Co., 40-40 Lawrence Street, Flushing 54, New York. INdependence 1-4100.

Isoniazid 80 lbs., PAS Sodium 200 lbs., PAS Acid 50 lbs. 30% off O.P.D. prices. OPD 897.

Save Money, Prime Isobutanol available in Tank Wagons. "World's Smallest Producer." Mercury Chemical Corporation, Edison, New Jersey. Liberty 8-1540.

Buy To Advantage: Acetic Anhydride, Acetic Acid (Glacial), Acetaldehyde. Produced locally for better service to you. Mercury Chemical Corporation, Edison, New Jersey. Liberty 8-1540.

PLANTS OFFERED

Heavy Chemical plant, 6 buildings, free water supply, 12 acres, power, H.P. boiler. Units of 7,000, 4,000, 10,000 sq. ft. leased or sold. 2 sidings, 60 miles from N. Y. in N. J. HUmboldt 3-0488. OPD 892.

POSITIONS OFFERED

Wanted: Experienced Chemist in the specialty field of textiles, leather and paper, including the field of sulfonation for various detergents and oils and the condensation reactions in the field of detergents. Reply OPD 899.

POSITIONS WANTED

Chemist-Attorney, heavy background of plant and patent acquisitions, seeks connection as industrial investigator and evaluator or related activity. OPD 898.

SERVICES OFFERED

Custom Grinding Mexico ores including Bentonite, Phosphate, Talc, etc. Will unload, stockpile, grind, warehouse and reload in cars. Write us for further information. Victoria Gin Company, Inc., P.O. Box 67, Brownsville, Texas.

Trade Name Chemicals

—*Continued from page 57*

exterior formulations for application on new concrete and masonry surfaces. Good results of **"Butaprene PL-13,"** used in latex base paints for interior applications led Firestone to investigate it for use in exterior finishes.

Several advantages found in the product for exterior use include ease of application, ease of clean-up, good moisture vapor permeability, speed of drying, self cleaning properties and good shelf stability. Furthermore, Firestone claims that **"Butaprene PL-13"** has good light stability, adhesion, and mildew resistance which are also important characteristics of an outdoor paint latex.

These developments, continues Firestone, make it possible for manufacturers of styrene-butadiene interior paints to also market satisfactory masonry paints. Also, manufacturers will have a saving in both finished goods and raw material inventories.

Surface Active Agents

"Surfonic" is the trade name for a series of nonionic surfactants produced by **Jefferson Chemical Company, Inc.** Described as being reaction products or adducts of nonylphenol, or tridecyl alcohol and ethylene oxide, there is a TD series and an N series.

According to Jefferson, as their molecular weights increase, the adducts change from nearly colorless, lightly viscous liquids to white, hard waxes. Also, the company says that the solubilities of the **"Surfonic N"** adducts extend over a wide range from oil-soluble, water-in-soluble to water-soluble, oil-insoluble.

More specifically, **"Surfonic N-40** and **N-60"** are said to be soluble in Stoddard Solvent, but insoluble in water. However, when either is added to water, it is transformed into a firm, immiscible gel, meaning that some hydration does take place. The gel formed from **"Surfonic N-60"** is supposedly dispersible in water, whereas **"Surfonic N-40"** is not. All of the **"Surfonic N"** adducts have in common the fact that they are soluble in acetone, methanol, xylene, carbon tetrachloride.

Concerning stability, Jefferson claims that both the N and TD series of **"Surfonics"** are compatible with other surfactants, acids, bases and salts. They are not precipitated by the calcium or magnesium ions of hard water or by other metallic ions. Addition of large quantities of electrolytes to an aqeuous solution of an adduct, however, continues the company, will reduce its solubility to such an extent that separation will take place.

With regard to solution preparation, Jefferson states that **"Surfonic N-95"** is distinguished by the ease with which it forms aqueous solutions. On the other hand, **"Surfonic N-120** and **N-150,"** although water-soluble, must be added either to hot water or, with vigorous stirring, to cold water. Jefferson also says that aqueous compositions containing 40 to 70 percent of another adduct of this series—**"Surfonic N-95"**—are gelatinous at room temperature. Finally, Jefferson suggests that a general rule to follow for this and all **"Surfonic"** adducts is that when preparing dilute aqueous solutions the adducts be added to water to avoid intermediate gel-forming compositions.

Procter & Gamble Distributing Company markets **"Orvus WA Paste."** This is a neutral synthetic detergent and wetting agent whose active ingredient is mainly sodium alkyl sulfate. Procter & Gamble describes their product as being a clear, light amber colored liquid above 80°F., becoming a white, opaque paste at lower temperature and being essentially free of inorganic salts.

Concerning stability and solubility factors, Procter & Gamble states that **"Orvus WA Paste"** is stable to water hardness and also in the presence of both acids and alkalis; and it is readily soluble in hot or cool water and is free rinsing in either.

Other **"Orvus"** products include **"Orvus ES Paste,"** another neutral synthetic detergent which has modified sodium alkyl sulfate as its active ingredient. A light colored amber paste, it is clear to temperatures as low as 60°F., it exhibits good surfactant properties in hard or soft water and under both acid and alkaline conditions, and it is soluble in hot or cold water.

Procter & Gamble's **Orvus K Liquid"** is an anionic synthetic detergent having an active ingredient of modified ammonium alkyl sulfate. Also soluble in hot or cool water and free rinsing in either, Procter & Gamble say that **"Orvus K Liquid"** has a low cloud point of about 40°F., and is stable to water hardness and acids. Furthermore, being an ammonium compound, the company claims that it will give off ammonia gas when mixed with alkalis, but will give good performance even under strongly alkaline conditions in operations where an ammonia odor is not objectionable.

MACHINECRAFT

Stokes 3 DDS2, 2 DS3.
Baker Perkins, 150 and 100 gal. S.S. 2 arm.
40 HP & 50 HP jacketed, vacuum, hydr. tilt.
Blaw-Knox 2 gal. S.S. Autoclave 5,000 lb.
Vulcanizer 60" x 9' 125 lbs.
Sweetland #2 all stainless.
Stainless steel Ball Mill.
Aluminum Condenser 350 square feet.
4-24" Filter Press S.S. Fittings Wood Fr.
1-24" Filter Press open delivery.
2 Proctor & Schwartz finned Drum Driers.
Continuous Stripping Column 2 x 13.
Alum Evaporator Calandria type 1,300 sq. ft.
Banbury Mixer Midget.
Ribbon Blenders. Hydraulic Pumps.

Louis Sussman, Inc.
800 Wilson Ave. (East of Doremus)
Newark 5, N.J. MI 2-7634

ECH SPECIALS

Abbe 5'x6' J'ktd. Ball Mill, chr. mang. steel
Sturtevant 2 ton Batch Blender, 11' drum
BP J'ktd. Mixer, 100 gal. w'k'g, cored arms
Day #4 gearless 80 gal. Pony Mixer, 10 HP
Rotex 40"x84" Sifter, #42, Dbl. sep., 1 HP
4 Mikro's-Bantam, #1SI, #2SI, #4 w/mtrs.
Gruendler "BB" Whirlbeater Hammer Mill
Howes 70 cu. ft. jktd. Mixer, with motor
Pfaudler 1500 gal. Glass Tank: closed top

WE BUY COMPLETE PLANTS
OR SINGLE UNITS
New machinery div. for new Fabrications
Tel. SOuth 8-4451—4452—8782
YOU CAN BANK ON
Equipment Clearing House, Inc.
111 33 Street, Brooklyn 32, N. Y.

CHEMICAL EQUIPMENT *(Bargains for Quick Sale)*

16—1020 Gals. Baker-Perkins Mixing Tumblers, Teflon Lined, direct Motoreducer Drives
8—1500 Gal. Vert. Jacketed Agitator Tanks, 75# Jacket press; with Motoreducer Drives
1—400 Gallon Struthers-Wells Reactor, S.S.
1—50 Gallon Pfaudler Reactor, Glass lined, Jacket 75# press
1—50 Gallon Pfaudler Open Glass Lined Jacketed Tank, 75# press.
1—Denver Thickener, Stainless Steel.
1—Dorr Oliver Filter, Stainless Steel.
1—Vogt Chiller
1—Proctor Schwartz Shelf Dryer, S.S. trays
1—2,600,000 BTU H Heat Exchanger, all-steel New 1957.
1—Aero Turn Dust Collector.
1—#20 Charlotte Colloid Mill.
1—48"x34' Accumulator Tank—1300# Press., A.S.M.E.
1—Selas Gas Furnace (Ammonia Superheater).
1—300 Gal. Baker-Perkins Double-Arm Shredder.

ALSO:—Stainless Steel Column, Stainless Tanks, 5 H.P. American Crusher, NEW Stainless Jacketed Valves and welding fittings, Stainless Steel Pumps, Stainless Condenser, Ammonia Compressor and many other items.

Call: Mr. Hunt
JOSEPH ROSENTHAL'S SONS, INC.
1843 N. Second Street, Phila. 22, Pa. • REgent 9-2816

BUY ON TERMS!

SPECIALS FROM OUR STOCK OF OVER 10,000

3-Stearns-Rogers 8' x 50' Rotary Dryers, ½" shell
3-Hersey 6' x 30' Rotary Dryers, Steam Heater Radiators
2-Link-Belt Bucket Elevators, 18" x 8" buckets on 12" centers, Single Case
1-Sperry 30" Cast Iron Filter, Stainless Steel frames. 54 plates. Closed delivery
1-New Entoleter, type BF2. Capacity 8 tons per hour. 10 HP Motor
3-Fitzpatrick Mills, Models D-6, K-8 and Model J Homoloid
1-8000 Gallon Steel Pressure Tank, 8' dia. x 20'. ASME 125# 210°
1-Lab. 6" x 12" Two Roll Rubber Mill. Equipped with 5 HP Gear Motor

For any item you need, wire or phone collect GA 1-1380
MACHINERY AND EQUIPMENT COMPANY
123 Townsend St. · San Francisco 7, California

WANTED! CHEMICALS—DYES PHARMACEUTICALS SOLVENTS—OILS INTERMEDIATES PLASTICIZERS—WAXES PIGMENTS—COLORS PACKAGED ITEMS EQUIPMENT—PLANTS BY-PRODUCTS
SELL NOW! TURN INVENTORIES INTO CASH!
Chemical Service Corporation
88 BEAVER ST., NEW YORK 5, N.Y.
Tel: Hanover 2-6970
Cable address "RETORTS" N. Y.

Season's Greetings and Best Wishes for A Happy and Prosperous New Year
THE MACHINERY & EQUIPMENT CO., Used Div. and HARING EQUIPMENT CORP.
91-93 New Jersey R.R. Ave., Newark 5, N.J.
MArket 2-3103

we will buy your...
SURPLUS CHEMICALS
SOLVENTS • WAXES • OILS
RESINS • DRUGS • COLORS
WIRE OR PHONE FOR IMMEDIATE ACTION
All offers held in strictest confidence
Barclay CHEMICAL COMPANY, INC.
77 VARICK STREET NEW YORK 13, N.Y. WO 6-4533

— WANTED FOR CASH —
Off Spec. Job-Lot Discontinued / SURPLUS Used or Spoiled — Glycols (Any Type) • Plasticizers • Vegetable—Animal Oils Solvents • Chemicals • Raw Materials & Finished Goods
Drum Lots to Tanker Lots . . . Any Quantity
Don't Throw Away Materials Which Are Seemingly Useless . . See Us First ! !
HIGHEST SPOT CASH PRICES PAID
CHEMSOL, INC., • Washington Ave. & Franklin St., New Market, N. J. • FLanders 1-3010 PLymouth 2-1140

WANT TO SELL INDUSTRIAL CHEMICALS TO COMMON MARKET?

Specialized Importer with adequate financial, sub-agent and warehousing facilities covering European Common Market since 1919 with outstanding selling record and excellent connections with

chemical
vitreous enamelling
paint
rubber
adhesive
dyestuff
plastics
glass
electrical, and
electroplating industries

about to extend activities, will accept representation one more competitive industrial chemical.

Replies to "Sales Extension"
Box 894, Oil, Paint and Drug Reporter, 30 Church Street, New York 17, N.Y.

Index of Advertisers

Acme Hardesty Co. ... 61
Air Reduction Chemical Co. ... 15
Allied Chemical Corporation, National Aniline Division ... 11
Allied Chemical Corporation—Plastics & Coal Chemicals Division ... 44
Allied Chemical Corporation, Solvay Process Division ... 21
American Cyanamid Company ... 25
American Firstoline Corporation ... 38
American Lignite Products Co. ... 62
American Potash & Chemical Corporation ... 28
Amoco Chemicals Corporation ... 18
Archer-Daniels-Midland Company, Chemical Products Division ... 62
Argueso, M., & Co., Inc. ... 61
Ashcraft-Wilkinson Co. ... 47

Baker, J. T., Chemical Co. ... 1
Barclay Chemical Company, Inc. ... 66
Becco Chemical Division, Food Machinery & Chemical Corp. ... 19, 36, 38
Bios Laboratories, Inc. ... 50
Blockson Chemical Company ... 40
Bonewitz Laboratories, Inc. ... 53
Bower, Henry, Chemical Mfg. Co. ... 38
Bowman, Charles, & Co. ... 53
Brill Equipment Company ... 63
Brode Corporation, The ... 62

Celanese Corporation of America, Chemical Division ... 68
Chemical Manufacturing Co., Inc. ... 37
Chemical & Process Machinery Corp. ... 65
Chemical Service Corp. ... 66
Chemical Solvents, Inc. ... 68
Chemsol, Inc. ... 66
Climax Molybdenum Company ... 36
Columbia Southern Chemical Corporation ... 33, 34, 35
Commercial Solvents Corporation ... 31
Concord Chemical Company ... 45
Conray Products Co., Division Chemical Service Corp. ... 53
Coupe, Robert A. ... 40
Cowles Chemical Company ... 37

Delhi-Taylor Oil Corp. ... 40
Diehl, Wm., & Co. ... 62
Distillation Products Industries, Div. of Eastman Kodak Company ... 43, 51
Dixon International, Inc. ... 40
Dow Chemical Company, The ... 33, 45
Drum Parts, Inc. ... 46
DuPont de Nemours, E. I., & Co.—(Inc) ... 1, 46
Duval Sulphur & Potash Co. ... 47

Emery Industries, Inc. ... 61
Equipment Clearing House, Inc. ... 66

Fairmount Chemical Co., Inc. ... 56
First Machinery Corp. ... 64
Florasynth Laboratories, Inc. ... 55
Freeport Sulphur Company ... 47
Fritzsche Brothers, Inc. ... 55

Gelb, R., & Sons, Inc. ... 65
Greeff, R. W., & Co. ... 17, 42
Gulf Oil Corporation ... 37

Harchem Division, Wallace & Tiernan, Inc. ... 61
Harshaw Chemical Co., The ... 50
Heat & Power Co., Inc. ... 63
Hercules Powder Company, Incorporated ... 27
Heyden Newport Chemical Corporation ... 58
Hoffmann-La Roche, Inc. ... 8, 49
Hooker Chemical Corporation ... 36
Hooker Chemical Corporation, Phosphorus Division ... 39
Huisking, Chas. L., & Co., Inc. ... 49
Hutchinson, D. W., & Co., Inc. ... 55

International Petrosolvents, Inc. ... 43

Jefferson Chemical Company, Inc. ... 43

Lawler Company ... 63
Lebanon Chemical Co. ... 47
Lever Brothers Company ... 42
Loeb, H., & Son ... 65
Loeb Equipment Supply Co. ... 65
Lucidol Division, Wallace & Tiernan, Incorporated ... 43

Machinecraft Corp. ... 63
Machinery & Equipment Company ... 63, 65, 66
Machinery & Equipment Co., The ... 66
Magnus, Mabee & Reynard, Inc. ... 55
Mantrose Corporation, The ... 59
Mason & Dixon Tank Lines ... 43
Michigan Chemical Corporation ... 16
Millmaster Chemical Corporation ... 68
Minute Maid Corporation, Citrus Products Division ... 54
Mississippi Lime Company ... 35
Mobil Oil Company, Division of Socony Mobil Oil Company, Inc. ... 60
Montrose Chemical Company ... 17
Mutual Citrus Products Company ... 22

Neville Chemical Company ... 68
Nylos Trading Co., Inc. ... 50
NYQ Chemical Division, S. B. Penick & Company ... 6

Olin Mathieson Chemical Corporation Chemicals Division ... 57
Oronite Chemical Company ... 20

Penick, S. B., & Company ... 55
Pennsalt Chemicals Corporation, Industrial Division ... 1
Penola Oil Company ... 29
Perry Equipment Corp. ... 64
Petro-Tex Chemical Corporation ... 13
Pfaltz & Bauer, Inc. ... 50
Pfizer, Chas., & Co., Inc. ... 48
Phelps Dodge Refining Corporation ... 36
Philipp Brothers Chemicals, Inc. ... 39
Plastics and Coal Chemicals Division, Allied Chemical Corporation ... 44
Polak's Frutal Works ... 56
Prior Chemical Corporation ... 1
Process Plants Service, Inc. ... 65
Procter & Gamble Co. ... 42
Publicker Industries, Inc. ... 10
Pure Carbonic Co. ... 38

Raney Catalyst Co. ... 42
Read, Chas. L., & Co., Inc. ... 58
Reinhart Chemical Corporation ... 45
Republic Steel Corporation ... 45
Riches-Nelson, Inc. ... 68
Richter, Gedeon Pharmaceutical Products, Inc. ... 53
Robeco Chemicals, Inc. ... 68
Rosenthal's, Joseph, Sons, Inc. ... 66
Ross, F. H., & Co. ... 33

Sergeant, E. M., Pulp & Chemical Co., Inc. ... 68
Shell Oil Company ... 41
Smith-Douglass Company, Inc. ... 40
Stauffer Chemical Company ... 14
Stein Equipment Co. ... 65
Sterwin Chemicals, Inc. ... 56
Sussman, Louis, Inc. ... 66
Synthetic Products Company ... 58

Tennessee Corporation ... 38

Union Carbide Chemicals Company, Division of Union Carbide Corporation ... 1
U. S. Borax & Chemical Corporation ... 1
United States Potash Company Division of U. S. Borax & Chemical Corp. ... 47
U. S. Steel Corp. ... 46
United Ultramarine & Chemical Company, Inc. ... 60

van Ameringen-Haebler, Division of International Flavor & Fragrances, Inc. ... 56
Ventura Processors ... 23

Wallerstein Company, Inc. ... 53
Welch, Holme & Clark Company, Inc. ... 62
Western Pennsylvania Chemical Co., Inc. ... 34
Westvaco Chlor-Alkali Division, Food Machinery & Chemical Corporation ... 50
Westvaco Mineral Products Division, Food Machinery & Chemical Corporation ... 2
Wolf, Bill, Inc. ... 63
Wyandotte Chemicals Corporation ... 37, 57

OPD's Advertising Staff

PRODUCTION: Claire Shannon

BUYERS DIRECTORY: Helen Lohse

NEW YORK (REctor 2-9820)—Alexander Kane, G. Bronson Philhower, Harry L. Townsend

CLEVELAND (LOng 1-0544)—Henry G. Seed, 17717 Lomond Boulevard, Cleveland 22, Ohio

MIAMI (FRanklin 9-2668)—John Printup & Associates, Langford Building, Miami 32, Fla.

DALLAS (DAvis 1-0898)—John Printup & Associates, 2607 Millmar Drive, Dallas 28, Tex.

LOS ANGELES (DUnkirk 7-4388)—Robert W. Walker Company, 730 South Western Avenue, Los Angeles 5, Calif.

SAN FRANCISCO (SUtter 1-5568)—Robert W. Walker Company, 57 Post Street, San Francisco

Current Market Quotations

—*Continued from page 31*

Vitamin B_{12}, oral grade solids, in containers of 1 and 10 gram of B_{12} activity	gram	110.00	—
0.1 percent trituration of cryst. B_{12} with dicalcium phosphate or mannitol, 1-10 kilo	kilo	138.00	—
Vitamin B_{12}, 0.1% cobalamin concentrate NF, adsorbed on resin, 500-gram bots., 1-5 kilo dms., frt. alld	gram	1.15	—
0.1% cobalamin concentrate in gelatin, 1-10 kilo dms., frt. alld	gram	1.15	—
Vitamin C (see Ascorbic acid)			
Vitamin D (see Codliver and Fish-liver oils, Calciferol and Viosterol).			
Vitamin D_2, dry, 850,000 units per gram, kilo lots	kilo	42.50	—
850,000 units per gram less than kilo lots	kilo	45.00	—
Vitamin E (see a-Tocopherol and Wheat germ oil)			
Vitamin G (see Riboflavin).			
Vitamin H (see Biotin)			
Vitamin K, active (see Menadione).			
Vitamin K_1, 25 gram bots	gram	4.50	—
Violet methyl toner (see Methyl violet toner).			
VM&P naphtha (see Naphtha, VM&P, petroleum).			

W

Wahoo root bark, bls	lb	2.25	2.50
Warfarin, 0.5%, dms., 50-lb. lots, dlvd	lb	1.95	—
dms., 25-49-lb. lots, New York or Chicago	lb	2.05	—
dms., 5-24-lb. lots, New York or Chicago	lb	2.15	—
Watchung-type reds, bbls	lb	1.95	—

WAXES
Wax quotations are listed individually. For example, prices on Wax, carnauba, may be found in the C's under Carnauba wax.

Wheat germ oil, 5-gal drms	gal.	12.25	—
White lead (see Lead, white).			
White mineral oil (see Mineral oil, white).			
White pine bark, rossed, bls	lb.	.21	.22
White precipitate USP powd. dms.,	lb	6.55	—
Whiting (see Calcium carbonate)			
Wild cherry bark, thin, nat., bls	lb.	.22	—
Thin, rossed, bls	lb.	.22	Nom.
Wintergreen oil, USP, nat., northern, cns	lb	6.35	17.50
USP, nat., southern, cns	lb	3.75	7.00
Wintergreen oil, syn (see Methyl salicylate).			
Witch hazel bark, bls	lb	.16	.17
Witch hazel leaves, bls	lb	.22	—
Wollastonite, fine, bgs., c.l., works	ton	39.50	—
bgs., l.c.l., ex whse	ton	56.00	—
Medium, bgs., c.l., works	ton	27.00	—
bgs., l.c.l., ex whse	ton	44.00	—
Wood alcohol (see Methanol).			
Wood oil (see Tung oil)			
Woolfat, crude (see Degras).			
Woolfat, USP (see Lanolin).			
Wormseed, Levant, bgs	lb	2.50	—
Wormseed oil (see Chenopodium oil NF).			
Wormwood oil, cns	lb.	4.75	5.00

X

Xylene, coaltar, indust., tanks, works:			
Bethlehem, Pa.	gal	.29	—
Birmingham dist.	gal	.29	—
Chicago dist.	gal.	.28½	—
Cleveland dist.	gal.	.29	—
Geneva, Utah	gal	.29	—
Johnstown, Pa.	gal	.29	—
Lackawanna, N. Y.	gal	29½	—
Lone Star, Tex.	gal.	.27	—
Lorain, Ohio	gal	.29	—
Middletown Ohio	gal	.30	—
Minnequa, Col.	gal	.29	—
Philadelphia dist.	gal.	.29	—
Pittsburgh dist.	gal.	.29	—
Sparrows Point, Md.	gal	.29	—
Terre Haute, Ind.	gal.	.29	—
Youngstown, Ohio	gal.	.29	—
Xylene, petroleum, indust., tanks, f.o.b works:			
Bayonne, N. J.	gal.	.29	—
Baytown, Tex.	gal.	.27	—
Charleston, S. C.	gal.	.29	—
Chicago Ill.	gal.	.28½	—
Detroit, Mich.	gal.	.29	—
Houston, Tex.	gal.	.27	—
Philadelphia, Pa.	gal.	.29	—
Providence, R. I.	gal.	.30	—
Sewell's Point, Va.	gal.	.28	—
Wood River, Ill.	gal.	.28½	—
Xylenol, cryst., 45°-47° C., m.p., dms., l.c.l., works	lb.	.23	—
56°-58° C., m.p., dms., l.c.l., works, frt. equald	lb.	.33	—
60°-62° C., m.p., dms., l.c.l., same basis	lb.	.40	—
Xylenol fraction, b.r. 7°-9° C., dry above 227° C., dms., c.l., same basis	gal	1.25	—
dms., l.c.l., same basis	gal.	1.30	—
tanks, same basis	gal.	1.05	—
b.r. 7°-9° C., dry at or below 227° C., dms., c.l., same basis,	gal.	1.35	—
dms., l.c.l., same basis	gal.	1.40	—
tanks, same basis	gal.	1.15	—
2,4-Xylidine, tech., dms. frt. alld.	lb.	1.15	—
2,5-Xylidine, tech., dms. frt. alld.	lb.	1.20	—
Xylidines, mixed, o-m-p, dms., c.l., or t.l., works	lb.	.39	—
dms., l.c.l., same basis	lb.	.40	—
tanks, same basis	lb	.38	—

XYLOL
Xylol quotations, both coaltar and petroleum, may be found under Xylene.

Y

Yara yara oil, cns	lb	2.15	3.05
Yeast, brewers, debittered, USP, Saccharomyces, dlvd	lb.	.27	—
Yeast, brewers, dry, USP, 50 Int'l B units per gram, 100-lb. dms,	lb.	.47	—
USP, 90 Int'l B units per gram, 100-lb dms	lb.	.52	—
Yeast, brewers, USP, 200 Int'l B units per gram, 100-lb. dms	lb.	.56	—
USP, 300 Int'l B units per gram, 100-lb. dms	lb.	.60	—
Torula, USP, dlvd	lb	.18	—

YELLOW PIGMENTS
Yellow pigment quotations are listed individually. For example, prices on Yellow, benzidine, may be found in the B's under Benzidine yellow.

Yerba santa leaves, bls	lb.	.40	.45
Ylang-ylang oil, Bourbon, bots	lb.	7.00	22.00
extra, bots.	lb.	28.00	33.00
Yohimbine hydrochloride, bots., tins.	oz.	3.75	4.25

Z

Zein, bgs., 36,000-lb lots or more, bgs. 500-lb lots or more dlvd.	lb.	.343	—
bgs. smaller lots, dlvd	lb.	.373	—
Zinc acetate, NF, Vill. dms	lb.	.53	—
Tech. dms., f.t.l. works	lb.	.29¾	—
Zinc borate, bgs., 1,650 lbs or more, works	lb.	.23	—
bgs., less than 1,000 lbs., same basis	lb.	.25	—
Zinc chloride, NF, gran., dms	lb.	.42	—
NF, precip., powd., dms	lb.	.26	—
Tech, soln, 50%, dms, c.l., works, 100 lbs		5.80	—
dms., l.c.l., works	100 lbs.	6.40	—
tanks, works	100 lbs.	5.15	—
fused, dms., c.l., works	100 lbs.	10.70	—
dms, l.c.l., works	100 lbs.	11.20	—
gran., fib, dms., c.l., works, 100 lbs.		11.45	—
fib dms, l.c.l., works	100 lbs.	11.95	—
Zinc chromate, bbls, dlvd	lb.	.29	—
Basic, bbls, dlvd	lb.	.34	—
Zinc cyanide, dms., 1,000-lb. lots or more, works	lb.	.55	—
dms., smaller lots, works	lb.	.57	—
Zinc dust, comt., bbls., c.l., works,	lb.	.1460	—
Pigment, bbls., c.l., works	lb.	.16½	—
bbls., l.c.l., works	lb.	.17	—
Zinc fluoride, bbls, works	lb.	.49	.50
Zinc hydrosulfite, dms., c.l., frt. alld	lb.	.21½	—
dms., l.c.l. frt. alld	lb.	.23½	—
Zinc metal, prime, western, slabs, E. St. Louis	lb.	.13	—
Prime western, slabs, New York,	lb.	.13½	—
Zinc naphthenate, liq., 8% Zn., dms., frt. alld	lb.	.27	—
10% Zn., dms., frt. alld	lb.	.33	—
Zinc nitrate, tech., cryst., bbls., works	lb.	.20	—
Zinc oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	—
bgs., l.c.l., 10 tons or more, same basis	lb.	.15	—
bgs., l.c.l., smaller lots, same basis	lb.	.15½	—
leaded, 35% bgs. c.l., mills, frt. alld	lb.	.15⅝	—
bgs. l.c.l. 10 tons or more, same basis	lb.	.15⅞	—
leaded, 50% bgs., c.l., same basis	lb.	.15¾	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¼	—
bgs. l.c.l. smaller lots, same basis	lb.	.16⅝	—
Zinc oxide pigment, French process, green seal, bgs., c.l., mills, frt. alld	lb.	.16¼	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¾	—
bgs. l.c.l. smaller lots, same basis	lb.	.17¼	—
red seal, bgs. c.l. same basis,	lb.	.15¾	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.16¼	—
bgs., l.c.l. smaller lots, same basis	lb.	.16¾	—
white seal, bgs., c.l., same basis	lb.	.16¾	—
bgs., l.c.l. 10 tons or more, same basis	lb.	.17¼	—
bgs., l.c.l., smaller lots, same basis	lb.	.17¾	—
Zinc oxide, USP, dms., c.l., frt. alld.	lb.	.18¼	—
dms., l.c.l., smaller lots, same basis	lb.	.19¼	—
Zinc phenolsulfonate, NF, gran., dms	lb.	.45	46
NF, powd., dms	lb.	.48	49
Zinc resinate, precip., 7.2-7.6% Zn., dms., frt. alld	lb.	.36¼	—
Zinc silicofluoride, dms., works	lb.	.12½	14
Zinc stearate, tech., USP, cns., c.l.,	lb.	41	—
cns., l.c.l.	lb.	.42	46
Zinc sulfate, powd., monohydrate, 36% Zn., bgs., c.l., dlvd, E	100 lbs.	8.75	—
bgs., l.c.l., dlvd, E	100 lbs.	9.75	—
USP, gran., dms.	lb.	.26	—
Zinc sulfate in bbls 40c. higher.			
Zinc sulfide pure, bgs., c.l., dlvd	lb	.2530	—
Zinc undecylenate, dms	lb.	2.00	—
Zinc yellow (see Zinc chromate).			
Zinc-ammonium chloride, bgs., c.l., works	100 lbs.	10.25	—
bbls, c.l., works	100 lbs.	10.85	—
bbls., l.c.l., works	100 lbs.	11 35	—
Zinc-formaldehyde sulfoxylate, basic, 300-lb. dms., frt. alld	lb	.26	—
Normal, 250-lb. dms., frt. alld	lb.	.52	—
Zircon (G), gran., bgs., c.l., works,	lb.	.03½	—
bgs., 5 tons to c.l., works	lb.	.03⅝	—
bgs., 1 ton to 9,999-lb lots, works,	lb.	.04	—
bgs., smaller lots, works	lb.	.06½	—
Milled, bgs., c.l., works	lb.	.04½	—
bgs., 5 tons to c.l., works	lb	.04⅝	—
bgs., 1 ton to 9,999-lb. lots, works	lb.	.04⅝	—
bgs., 500-1,999-lb lots, works	lb.	.07½	—
Zircon (G) in barrels 1c. higher.			
Zirconium acetate, soln, 13% ZrO_2, dms., c.l., 30,000 lbs. min., works	lb.	.23	—
Zirconium hydride, powd., electronic grade, dms., works	lb.	14.00	15.00
Zirconium oxide, CP, white, grd., bbls or bgs., works	lb.	1.50	—
Electric-fused, lump, bgs., 500 to 1,999-lb. lots, works	lb.	.48½	
bgs., smaller lots, works	lb.	.51	—
milled, bgs., c.l., works	lb.	.62	—
bgs., 5-ton lots, works	lb.	.62½	—
bgs., 1-ton to 9,999-lb. lots, works	lb.	.63½	—
bgs., 500 to 1,999-lb. lots., works	lb.	.64	—
bgs., smaller lots, works	lb.	.66	—
Glass polishing grade, 94-97% ZrO_2, bgs., works	lb.	.55	.65
Opacifier grade, 85-90% ZrO_2, bgs.,	lb.	.27	.50
Stabilized oxide, 91% ZrO_2, milled, bgs	lb.	.69	.85
Zirconium oxychloride, cryst., cns., 5-ton lots, works	lb.	.37½	—

Drugs, Fine Chemicals

—*Continued from page 50*

liquid products, and at 13c. per million units for dry forms.

Prior to this change, one producer issued a substantially lower schedule (down 9 cents to 19 cents a gram) for folic acid but this has not been uniformly adopted throughtout the trade. Reports indicate, however, that big lot trading is being conducted at the lower levels, as is necessary in such a competitive market.

Just before the reductions were announced the Customs bureau disclosed that it was in the initial stage of an investigation into charges that folic was being dumped on these shores by foreign producers at less than fair value. No more has been heard from Customs, and as these investigations require considerable probing, a further report is not likely immediately.

Botanicals

Buchu Leaves—Quote on buchu leaves went to 80c.-85c. per pound last week, up about 5 cents from the previous level. The markup, dealers said, reflected the less than normal availability of new crop material.

Earlier this year, the quote had been, first, 95c. per pound, then $1.05. From this high, it dropped to 90c. and finally to 75c. earlier this fall.

Colchicum Root—New crop is coming in, but as yet prices have not been affected either way. For the root, the listing is still 30c.-35c. a pound and for the seed it remains at 60c.-65c. a pound. Moderate to good demand is reported.

Linden Flowers—Higher prices were posted by dealers here last week for both varieties of linden flowers. Up from 7 cents to 10 cents a pound, new schedules reflect higher replacement costs.

Quote on linden flowers with leaves is now 35c.-40c. per pound, while material without leaves is priced at 42c. to 45c. a pound.

Papain—The Food and Drug Administration detained 7 lots (428 cases) of papain at the Port of New York during the two week period ended December 10. But as this is something that frequently happens, it has had no effect on the market.

Quince Seed—A fair amount of interest is noted on spot, at prices ranging from $1.15 to $1.50 a pound. Persian seed is commanding the best prices, Spanish material the lower.

New crop material is beginning to arrive here but as yet, anyway, this has not caused prices to fluctuate either way.

Tolu Balsam—Quote on tolu balsam, according to a major dealer here, is currently $3.50 a pound. Interest is said to be good, supplies a bit tight.

YOUR CONTACT WITH THE WORLD'S MARKETS
ROBECO
ESTABLISHED 1918

ACETOIN
ACETYL PROPIONYL
DIACETYL

SOLE U. S. SELLING AGENT
for
ETABS. LAMBIOTTE FRERES
PARIS, FRANCE

ROBECO CHEMICALS, INC.
25 EAST 26th ST., NEW YORK 10, N. Y.
CABLE ADDRESS "RODRUG" N. Y. ALL CODES
MUrray Hill 3-7500

CYCLOHEXANONE "HYTROL"* O
CYCLOHEXANOL "HEXALIN"*
Drums • Tank Wagons
*Reg. Trade Mark

GLYCOL ETHERS • ALIPHATIC NAPHTHAS • AMINES
ESTERS • AROMATIC SOLVENTS • PLASTICIZERS
CHLORINATED SOLVENTS
KETONES • GLYCOLS
ALCOHOLS

MArket 2-3650 (N.J.)
WOrth 2-7763 (N.Y.)

CS CHEMICAL SOLVENTS, INC.
60 PARK PLACE, NEWARK 2, N. J.

Hi-Flash Solvents
NEVILLE CHEMICAL COMPANY • Pittsburgh 25, Pa.
Manufacturers of Hydrocarbon Resins, Oils and Solvents
NEVILLE

PHOSPHORIC ACID, 85% N. F.
Tank Trucks, Drums, Carboys

PHOSPHORIC ACID, 80% F. G.
Tank Cars, Tank Trucks

PHOSPHORIC ACID, 75% F. G.
Tank Cars, Tank Trucks, Drums, Carboys

DOMESTIC and EXPORT

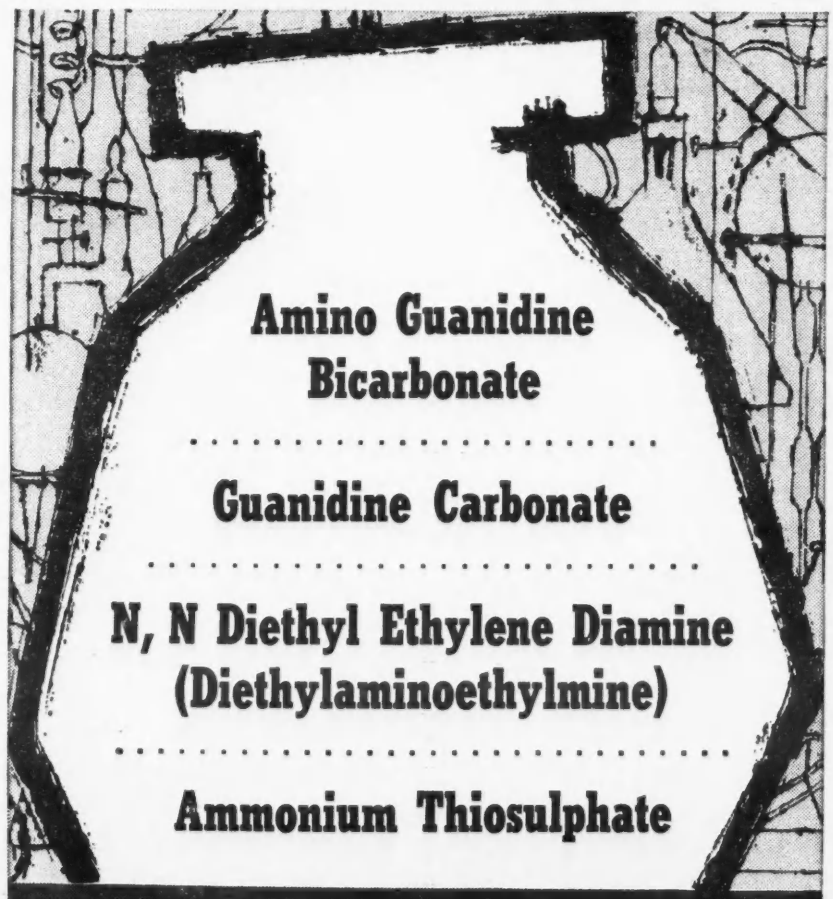
RN

MURRAY HILL 7-7267
RICNELCHEM, N. Y.

RICHES-NELSON, INC.
Chemicals and Allied Products
342 MADISON AVENUE, NEW YORK 17, N. Y.
European Affiliate
RICHES-NELSON, S. P. R. L., 72, Ave. Brillat-Savarin, BRUXELLES, BELGIUM

SODIUM SULPHATE ANHYDROUS

E. M. SERGEANT
PULP & CHEMICAL CO., INC.
7 DEY STREET · NEW YORK 7, N.Y.
Established 1867



Amino Guanidine Bicarbonate

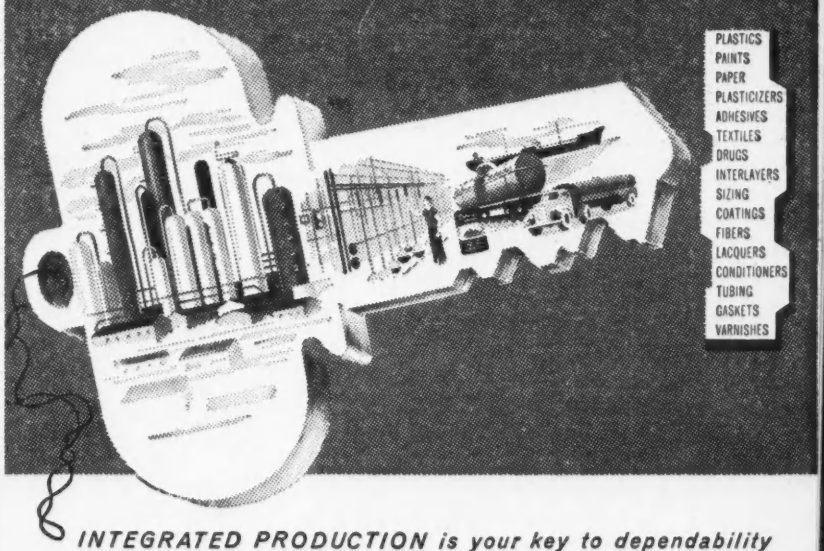
Guanidine Carbonate

N, N Diethyl Ethylene Diamine (Diethylaminoethylmine)

Ammonium Thiosulphate

Millmaster
Chemical Corporation
99 PARK AVENUE, NEW YORK 16, NEW YORK · MU 7-2757

CELANESE VINYL ACETATE MONOMER



INTEGRATED PRODUCTION is your key to dependability

We make the raw materials for vinyl acetate and combine these materials to form the monomer. We exercise control of all the processes basic to the finished product. Result: you benefit when you buy high-quality $CH_3CO_2CH{:}CH_2$ monomer from the Celanese Corporation of America. With a reliable monomeric product as a start, you can be confident of achieving the best possible results. You can polymerize Celanese vinyl acetate, make copolymers with it, use it as an intermediate to prepare pharmaceuticals and fine organic compounds. Write for technical data on this dependable monomer today.
Celanese Corporation of America, Chemical Division, 180 Madison Ave., N. Y. 16.
Celanese®

Canadian Affiliate: Canadian Chemical Company Limited, Montreal, Toronto, Vancouver.
Export Sales: Amcel Co., Inc., and Pan Amcel Co., Inc., 180 Madison Avenue, N. Y. 16.

Celanese CHEMICALS